Table of Contents: ARI Job VR80

Client: Anchor QEA, LLC

Project: City of Kenmore

BC
Signature

November-27-2012
Date

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Analytical Resources, Incorporated
Analytical Chemists and Consultants

December 11, 2012

Cindy Fields
Anchor QEA
720 Olive Way, Suite 1900
Seattle, WA 98101

RE: Client Project: City of Kenmore, 120891-01.01
ARI Job No.: VR80

Dear Cindy:

Please find enclosed the Chain of Custody record (COC), sample receipt documentation, and the final data package for samples from the project referenced above.

Sample receipt and details of these analyses are discussed in the Case Narrative.

An electronic copy of this package will remain on file with ARI. Should you have any questions or problems, please feel free to contact me at your convenience.

Sincerely,

ANALYTICAL RESOURCES, INC.

Cheronne Oreiro
Project Manager
(206) 695-6214
cheronneo@arilabs.com
www.arilabs.com

cc: eFile: VR80

Enclosures

Chain of Custody Documentation

ARI Job ID: VR80

Chain of Custody Record & Laboratory Analysis Request

ARI Assigned Number: VR90	Turn-around Requested: Std.	Page:	of
ARI Client Company: Anchor QEA	Phone: 206 287 9130	Date: 11/7/12	Ice Present? X
Client Contact:		No. of Coolers: 2	Cooler Temps: 2.7
Client Project Name:			
Client Project #:	Samplers:		

Analytical Resources, Incorporated
Analytical Chemists and Consultants
4611 South 134th Place, Suite 100
Tukwila, WA 98168
206-695-6200 206-695-6201 (fax)

Sample ID	Date	Time	Matrix	No Containers	Total Metals	Dissolved Metals *	SVOC	PAH (SIM)	PCP	TSS	TDS	Hardness	Notes/Comments
HT-01-W-C-121107	11/7/12	1546	water	11	X	X	X	X	X	X	X	X	
HT-04-W-C-121107	11/7/12	1615	water	11	X	X	X	X	X	X	X	X	
HT-04-W-C-dup-121107	11/7/12	1615	water	11	X	X	X	X	X	X	X	X	
HT-10-W-C-121107	11/7/12	1450	water	11	X	X	X	X	X	X	X	X	
					* Lab filtered for Dissolved Metals								

Comments/Special Instructions	Relinquished by (Signature)	Received by (Signature)	Relinquished by (Signature)	Received by (Signature)
	Printed Name: David Gillingham	Printed Name: Chris Atwell	Printed Name:	Printed Name:
	Company: Anchor QEA	Company: ARI	Company:	Company:
	Date & Time: 11/8/12 0600	Date & Time: 11/8/12 0935	Date & Time:	Date & Time:

Limits of Liability: *ARI will perform all requested services in accordance with appropriate methodology following ARI Standard Operating Procedures and the ARI Quality Assurance Program. This program meets standards for the industry. The total liability of ARI, its officers, agents, employees, or successors, arising out of or in connection with the requested services, shall not exceed the Invoiced amount for said services. The acceptance by the client of a proposal for services by ARI release ARI from any liability in excess thereof, not withstanding any provision to the contrary in any contract, purchase order or co-signed agreement between ARI and the Client.*

Sample Retention Policy: All samples submitted to ARI will be appropriately discarded no sooner than 90 days after receipt or 60 days after submission of hardcopy data, whichever is longer, unless alternate retention schedules have been established by work-order or contract.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client Anchor

Project Name City of Kenmore

COC No(s) (NA)

Delivered by Fed-Ex UPS Courier Hand Delivered Other

Assigned ARI Job No VK80

Tracking No (NA)

Preliminary Examination Phase.

Were intact, properly signed and dated custody seals attached to the outside of to cooler? YES (NO)

Were custody papers included with the cooler? (YES) NO

Were custody papers properly filled out (ink, signed, etc.) (YES) NO

Temperature of Cooler(s) (°C) (recommended 2.0-6.0 °C for chemistry) 2.2 2.1

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID# 90877552

Cooler Accepted by CA Date 11-8-12 Time 0935

Complete custody forms and attach all shipping documents

Log-In Phase:

Was a temperature blank included in the cooler? YES (NO)

What kind of packing material was used? (Bubble Wrap) (Wet Ice) Gel Packs Baggies Foam Block Paper Other:

Was sufficient ice used (if appropriate)? NA (YES) NO

Were all bottles sealed in individual plastic bags? YES (NO)

Did all bottles arrive in good condition (unbroken)? (YES) NO

Were all bottle labels complete and legible? (YES) NO

Did the number of containers listed on COC match with the number of containers received? (YES) NO

Did all bottle labels and tags agree with custody papers? (YES) NO

Were all bottles used correct for the requested analyses? (YES) NO

Do any of the analyses (bottles) require preservation? (attach preservation sheet, excluding VOCs) NA (YES) NO

Were all VOC vials free of air bubbles? (NA) YES NO

Was sufficient amount of sample sent in each bottle? (YES) NO

Date VOC Trip Blank was made at ARI. (NA)

Was Sample Split by ARI (NA) YES Date/Time _____ Equipment _____ Split by _____

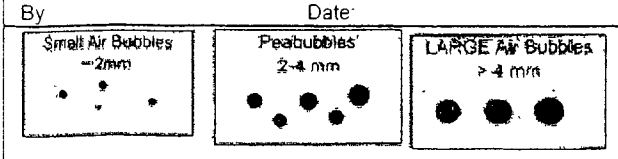
Samples Logged by JM Date 11/9/12 Time 625

***** Notify Project Manager of discrepancies or concerns *****

Sample ID on Bottle	Sample ID on COC	Sample ID on Bottle	Sample ID on COC

Additional Notes, Discrepancies, & Resolutions:

By Date



Small → "sm"

Peabubbles → "pb"

Large → "lg"

Headspace → "hs"

PRESERVATION VERIFICATION 11/09/12
Page 1 of 1

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: **VR80**

Inquiry Number: NONE
Analysis Requested: 11/08/12
Contact: Fields, Cindy
Client: Anchor QEA, LLC
Logged by: JM
Sample Set Used: Yes-481
Validatable Package: LV4
Deliverables:

PC: Cheronne
VTSR: 11/08/12

Project #:
Project: City of Kenmore
Sample Site:
SDG No:
Analytical Protocol: In-house

LOGNUM ARI ID	CLIENT ID	CN >12	WAD >12	NH3 <2	COD <2	FOG <2	MET <2	PHEN <2	PHOS <2	TKN <2	NO23 <2	TOC <2	S2 >9	TPHD <2	Fe2+ <2	DMET FLT	DOC FLT	PARAMETER	ADJUSTED TO	LOT NUMBER	AMOUNT ADDED	DATE/BY
12-22456 **VR80A**	HT-01-W-C-121107						TOT pass															
12-22457 **VR80B**	HT-04-W-C-121107						TOT pass															
12-22458 **VR80C**	HT-04-W-C-dup-121107						TOT pass															
12-22459 **VR80D**	WS-10-W-C-121107						TOT pass															
12-22460 **VR80E**	HT-01-W-C-121107						DIS fail									N		pH	L2	492342	2ml	11/09/12 CB
12-22461 **VR80F**	HT-04-W-C-121107						DIS fail									N						
12-22462 **VR80G**	HT-04-W-C-dup-121107						DIS fail									N						
12-22463 **VR80H**	WS-10-W-C-121107						DIS fail									N						

Filter 2 Preserve Samples E-H in 196 - CB 11/09/12

Checked By JM Date 11/9/12

SPEC - SPECS

Case Narrative, Data Qualifiers, Control Limits

ARI Job ID: VR80

ANALYTICAL
RESOURCES
INCORPORATED

Case Narrative

Client: Anchor QEA
Project: City of Kenmore, 120891-01.01
ARI Job No.: VR80

Sample receipt

Four water samples were received on November 8, 2012 under ARI job VR80. The cooler temperatures measured by IR thermometer following ARI SOP were 2.1 and 2.2°C. For further details regarding sample receipt, please refer to the Cooler Receipt Form.

Semivolatiles by SW8270

The samples were extracted and analyzed within the method recommended holding times.

Initial and continuing calibrations were within method requirements. Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limits. The LCS and LCSD percent recoveries were within control limits.

PAHs by SW8270-SIM

The samples were extracted and analyzed within the method recommended holding times.

Initial and continuing calibrations were within method requirements. Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limits. The LCS and LCSD percent recoveries were within control limits.

Pesticides (Hexachlorobutadiene) by SW8081

The samples were extracted and analyzed within the method recommended holding times.

Initial and continuing calibrations were within method requirements. Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS and LCSD percent recoveries were within control limits.

Pentachlorophenol by SW8041

The samples were extracted and analyzed within the method recommended holding times.

Initial and continuing calibrations were within method requirements.

The surrogate percent recoveries were within control limits.

The method blank was clean at the reporting limit. The LCS and LCSD percent recoveries were within control limits.

Metals and Mercury by SW200.8/6010C/7470A

The samples and associated laboratory QC were digested and analyzed within recommended holding times.

The method blanks were clean at the reporting limits. The LCS percent recoveries were within control limits.

The matrix spike percent recoveries and duplicate RPDs were within control limits.

General Chemistry Parameters

The samples and associated laboratory QC were prepared and analyzed within the method recommended holding times.

The method blanks were clean at the reporting limits. The LCS percent recoveries were within control limits.

The replicate RPD was within limits.

Sample ID Cross Reference Report

ANALYTICAL RESOURCES INCORPORATED

ARI Job No: VR80
Client: Anchor QEA, LLC
Project Event: N/A
Project Name: City of Kenmore

	Sample ID	ARI Lab ID	ARI LIMS ID	Matrix	Sample Date/Time	VTSR
1.	HT-01-W-C-121107	VR80A	12-22456	Water	11/07/12 15:46	11/08/12 09:35
2.	HT-04-W-C-121107	VR80B	12-22457	Water	11/07/12 16:15	11/08/12 09:35
3.	HT-04-W-C-dup-121107	VR80C	12-22458	Water	11/07/12 16:15	11/08/12 09:35
4.	WS-10-W-C-121107	VR80D	12-22459	Water	11/07/12 14:50	11/08/12 09:35
5.	HT-01-W-C-121107	VR80E	12-22460	Water	11/07/12 15:46	11/08/12 09:35
6.	HT-04-W-C-121107	VR80F	12-22461	Water	11/07/12 16:15	11/08/12 09:35
7.	HT-04-W-C-dup-121107	VR80G	12-22462	Water	11/07/12 16:15	11/08/12 09:35
8.	WS-10-W-C-121107	VR80H	12-22463	Water	11/07/12 14:50	11/08/12 09:35

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Data Reporting Qualifiers

Effective 2/14/2011

Inorganic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Duplicate RPD is not within established control limits
B	Reported value is less than the CRDL but ≥ the Reporting Limit
N	Matrix Spike recovery not within established control limits
NA	Not Applicable, analyte not spiked
H	The natural concentration of the spiked element is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
L	Analyte concentration is ≤5 times the Reporting Limit and the replicate control limit defaults to ±1 RL instead of the normal 20% RPD

Organic Data

U	Indicates that the target analyte was not detected at the reported concentration
*	Flagged value is not within established control limits
B	Analyte detected in an associated Method Blank at a concentration greater than one-half of ARI's Reporting Limit or 5% of the regulatory limit or 5% of the analyte concentration in the sample.
J	Estimated concentration when the value is less than ARI's established reporting limits
D	The spiked compound was not detected due to sample extract dilution
E	Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20%Drift or minimum RRF).

S	Indicates an analyte response that has saturated the detector. The calculated concentration is not valid; a dilution is required to obtain valid quantification of the analyte
NA	The flagged analyte was not analyzed for
NR	Spiked compound recovery is not reported due to chromatographic interference
NS	The flagged analyte was not spiked into the sample
M	Estimated value for an analyte detected and confirmed by an analyst but with low spectral match parameters. This flag is used only for GC-MS analyses
M2	The sample contains PCB congeners that do not match any standard Aroclor pattern. The PCBs are identified and quantified as the Aroclor whose pattern most closely matches that of the sample. The reported value is an estimate.
N	The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification"
Y	The analyte is not detected at or above the reported concentration. The reporting limit is raised due to chromatographic interference. The Y flag is equivalent to the U flag with a raised reporting limit.
EMPC	Estimated Maximum Possible Concentration (EMPC) defined in EPA Statement of Work DLM02.2 as a value "calculated for 2,3,7,8-substituted isomers for which the quantitation and /or confirmation ion(s) has signal to noise in excess of 2.5, but does not meet identification criteria" **(Dioxin/Furan analysis only)**
C	The analyte was positively identified on only one of two chromatographic columns. Chromatographic interference prevented a positive identification on the second column
P	The analyte was detected on both chromatographic columns but the quantified values differ by ≥40% RPD with no obvious chromatographic interference
X	Analyte signal includes interference from polychlorinated diphenyl ethers. **(Dioxin/Furan analysis only)**
Z	Analyte signal includes interference from the sample matrix or perfluorokerosene ions. **(Dioxin/Furan analysis only)**

Geotechnical Data

A	The total of all fines fractions. This flag is used to report total fines when only sieve analysis is requested and balances total grain size with sample weight.
F	Samples were frozen prior to particle size determination
SM	Sample matrix was not appropriate for the requested analysis. This normally refers to samples contaminated with an organic product that interferes with the sieving process and/or moisture content, porosity and saturation calculations
SS	Sample did not contain the proportion of "fines" required to perform the pipette portion of the grain size analysis
W	Weight of sample in some pipette aliquots was below the level required for accurate weighting

LOD, LOQ and Control Limits Summary
GC - MS – SVOA Analysis of Aqueous Samples
EPA Method 8270D
ARI Analysis: BANWLI & BANWSI

Continuous Liquid-Liquid (EPA Method 3520C, Bench Sheet 3006F) or Separatory Funnel (EPA method 3510C, Bench Sheet 3010F) extraction using 500mL sample concentrated to 0.5 mL final extract volume

LOD Spike level = LOQ (unless otherwise noted)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS, MS Recovery[2,3]	Replicate RPD[4]
Phenol	**0.445**	**0.5**	**1**	26 – 112	≤ 40
Bis(2-Chloroethyl)ether	**0.257**	**0.5**	**1**	51 – **100**	≤ 40
2-Chlorophenol	**0.246**	**0.5**	**1**	50 – **100**	≤ 40
1,3-Dichlorobenzene	**0.499**	**0.5**	**1**	27 – **100**	≤ 40
1,4-Dichlorobenzene	**0.470**	**0.5**	**1**	29 – **100**	≤ 40
1,2-Dichlorobenzene	**0.436**	**0.5**	**1**	32 – **100**	≤ 40
Benzyl alcohol	**0.409**	**1.0**	**2**	**10** - 128	≤ 40
2,2'-oxybis(1-Chloropropane)	**0.221**	**0.5**	**1**	39 - 101	≤ 40
2-Methylphenol	**0.329**	**0.5**	**1**	47 – **100**	≤ 40
Hexachloroethane	**0.610**	**1.0**	**2**	19 – **100**	≤ 40
N-Nitroso-di-n-propylamine	**0.365**	**0.5**	**1**	46 – **100**	≤ 40
4-Methylphenol	**0.536**	**1.0**	**2**	46 – **100**	≤ 40
Nitrobenzene	**0.490**	**0.5**	**1**	46 – 103	≤ 40
Isophorone	**0.258**	**0.5**	**1**	62 – 105	≤ 40
2-Nitrophenol	**0.979**	**1.5**	**3**	32 – 116	≤ 40
2,4-Dimethylphenol	**0.627**	**1.5**	**3**	15 – **100**	≤ 40
Bis(2-Chloroethoxy)methane	**0.252**	**0.5**	**1**	44 – **100**	≤ 40
2,4-Dichlorophenol	**1.109**	**1.5**	**3**	35 – 114	≤ 40
1,2,4-Trichlorobenzene	**0.495**	**0.5**	**1**	34 – **100**	≤ 40
Naphthalene	**0.326**	**0.5**	**1**	48 – **100**	≤ 40
Benzoic acid	**8.647**	**10**	**20**	**10** - 172	≤ 40
4-Chloroaniline	**1.733**	**2.5**	**5**	**10** - 153	≤ 40
2,6-Dinitrotoluene	**1.300**	**1.5**	**3**	32 – 129	≤ 40
Hexachlorobutadiene	**0.604**	**1.5**	**3**	22 – **100**	≤ 40
4-Chloro-3-methylphenol	**0.919**	**1.5**	**3**	33 – 123	≤ 40
Hexachlorocyclopentadiene	**1.862**	**2.5**	**5**	**10** – **100**	≤ 40
2,4,6-Trichlorophenol	**1.235**	**1.5**	**3**	37 – 120	≤ 40
2,4,5-Trichlorophenol	**1.706**	**2.5**	**5**	37 – 124	≤ 40
2-Chloronaphthalene	**0.340**	**0.5**	**1**	49 – **100**	≤ 40
2-Nitroaniline	**0.784**	**1.5**	**3**	18 – 140	≤ 40
Acenaphthylene	**0.274**	**0.5**	**1**	47 – 110	≤ 40
Dimethylphthalate	**0.264**	**0.5**	**1**	60 – 106	≤ 40
Acenaphthene	**0.347**	**0.5**	**1**	55 – 101	≤ 40

LOD, LOQ and Control Limits Summary
GC - MS – SVOA Analysis of Aqueous Samples
EPA Method 8270D
ARI Analysis: BANWLI & BANWSI

Continuous Liquid-Liquid (EPA Method 3520C, Bench Sheet 3006F) or Separatory Funnel (EPA method 3510C, Bench Sheet 3010F) extraction using 500mL sample concentrated to 0.5 mL final extract volume

LOD Spike level = LOQ (unless otherwise noted)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS, MS Recovery[2,3]	Replicate RPD[4]
3-Nitroaniline	**1.140**	**1.5**	**3**	**10** – 208	≤ 40
2-Methylnaphthalene	**0.241**	**0.5**	**1**	38 – **100**	≤ 40
2,4-Dinitrophenol	**5.474**	**10**	**20**	**10** – 224	≤ 40
Dibenzofuran	**0.198**	**0.5**	**1**	46 – 108	≤ 40
4-Nitrophenol	**2.895**	**5.0**	**10**	**10** – 103	≤ 40
2,4-Dinitrotoluene	**1.277**	**1.5**	**3**	33 – 134	≤ 40
Fluorene	**0.266**	**0.5**	**1**	59 – 108	≤ 40
4-Chlorophenyl-phenylether	**0.342**	**0.5**	**1**	54 – 104	≤ 40
Diethylphthalate	**0.407**	**0.5**	**1**	60 - 108	≤ 40
4-Nitroaniline	**1.366**	**1.5**	**3**	13 – 144	≤ 40
4,6-Dinitro-2-methylphenol	**4.928**	**5.0**	**10**	**10** – 190	≤ 40
N-Nitrosodiphenylamine	**0.392**	**0.5**	**1**	39 – 100	≤ 40
4-Bromophenyl-phenylether	**0.262**	**0.5**	**1**	56 – 105	≤ 40
Hexachlorobenzene	**0.335**	**0.5**	**1**	54 – 108	≤ 40
Pentachlorophenol	**2.746**	**5.0**	**10**	25 – 144	≤ 40
Phenanthrene	**0.283**	**0.5**	**1**	64 – 115	≤ 40
Anthracene	**0.303**	**0.5**	**1**	59 – 107	≤ 40
Carbazole	**0.251**	**0.5**	**1**	36 – 123	≤ 40
Di-n-butylphthalate	**0.304**	**0.5**	**1**	62 – 110	≤ 40
Fluoranthene	**0.290**	**0.5**	**1**	63 – 119	≤ 40
Pyrene	**0.379**	**0.5**	**1**	57 – 117	≤ 40
Butylbenzylphthalate	**0.402**	**0.5**	**1**	49 – 118	≤ 40
Benzo(a)anthracene	**0.373**	**0.5**	**1**	61 – 113	≤ 40
3,3'-Dichlorobenzidine	**1.553**	**2.5**	**5**	**10** – 151	≤ 40
Chrysene	**0.397**	**0.5**	**1**	62 – 115	≤ 40
bis(2-Ethylhexyl)phthalate	**1.050**	**1.5**	**3**	47 – 127	≤ 40
Di-n-octylphthalate	**0.331**	**0.5**	**1**	60 – 106	≤ 40
Benzo(b)fluoranthene	**0.298**	**0.5**	**1**	61 – 120	≤ 40
Benzo(k)fluoranthene	**0.487**	**0.5**	**1**	59 – 120	≤ 40
Benzo(a)pyrene	**0.425**	**0.5**	**1**	46 – 105	≤ 40
Indeno(1,2,3-cd)pyrene	**0.435**	**0.5**	**1**	42 – 134	≤ 40
Dibenzo(a,h)anthracene	**0.437**	**0.5**	**1**	46 – 132	≤ 40
Benzo(g,h,i)perylene	**0.464**	**0.5**	**1**	33 – 135	≤ 40
N-Nitrosodimethylamine	**1.209**	**1.5**	**3**	17 - 106	≤ 40

LOD, LOQ and Control Limits Summary
GC - MS – SVOA Analysis of Aqueous Samples
EPA Method 8270D
ARI Analysis: BANWLI & BANWSI

Continuous Liquid-Liquid (EPA Method 3520C, Bench Sheet 3006F) or Separatory Funnel (EPA method 3510C, Bench Sheet 3010F) extraction using 500mL sample concentrated to 0.5 mL final extract volume

LOD Spike level = LOQ (unless otherwise noted)

Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS, MS Recovery[2,3]	Replicate RPD[4]
Aniline	**0.470**	**0.5**	**1**	**10** – 113	≤ 40
1-methylnaphthalene	**0.199**	**0.5**	**1**	43 – **100**	≤ 40
Azobenzene (1,2-DP-Hydrazine)	**0.214**	**0.5**	**1**	52 – 111	≤ 40
Benzofluoranthenes, Total	**2.317**	**2.5**	**5**	60 – 130[5]	≤ 40
Surrogate Standard Recovery			**MB / LCS**	**Samples**	**RPD**
2-Fluorophenol			33 – 100	23 – **100**	≤ 40
Phenol-d_5			15 - 121	16 – 106	≤ 40
2-Chlorophenol-d_4			46 – 102	33 – 100	≤ 40
1,2-Dichlorobenzene-d_4			40 – **100**	27 – **100**	≤ 40
Nitrobenzene-d_5			50 – **100**	34 – 101	≤ 40
2-Fluorobiphenyl			51 – **100**	38 – **100**	≤ 40
2,4,6-Tribromophenol			46 – 125	31 – 128	≤ 40
p-Terphenyl-d_{14}			54 – 117	27 – 122	≤ 40

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation (LOQ) are defined in ARI SOP 1018S
(2) Control limits calculated using all data from 8/1/10 through 7/31/11.
(3) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
(4) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

(5) 30 – 160 are default limits used when there is insufficient data to calculate historic control limits.

DL[1], LOD[2], LOQ[3] and Control Limits Summary
Analysis of Water Samples for PNA
EPA Method 8270 – SIM
ARI Analyses: PNSWLL & PNSWSL

Separatory Funnel (EPA Method 3510C) or Liq-Liq (EPA Method 3520C) Extraction using 500 mL sample with extract concentrated to 0.5 mL final volume. ARI Bench Sheet 3053F or 3054F

LOD Spike level = LOQ = 0.1ppb

Analyte	DL[1] µg/L	LOD[2] µg/L	LOQ[3] µg/L	LCS Control Limit[4,5]	Replicate RPD[6]
Naphthalene	0.020	**0.050**	**0.1**	37 – 100	≤ 40
2-Methylnaphthalene	0.020	**0.050**	**0.1**	34 – 107	≤ 40
Acenaphthylene	0.024	**0.050**	**0.1**	32 – 104	≤ 40
Acenaphthene	0.015	**0.050**	**0.1**	40 – 102	≤ 40
Dibenzofuran	0.016	**0.050**	**0.1**	44 – 104	≤ 40
Fluorene	0.019	**0.050**	**0.1**	43 – 114	≤ 40
Phenanthrene	0.026	**0.050**	**0.1**	43 – 116	≤ 40
Anthracene	0.025	**0.050**	**0.1**	30 – 121	≤ 40
Fluoranthene	0.021	**0.050**	**0.1**	46 – 138	≤ 40
Pyrene	0.028	**0.050**	**0.1**	47 – 124	≤ 40
Benzo(a)anthracene	0.023	**0.050**	**0.1**	38 – 134	≤ 40
Chrysene	0.026	**0.050**	**0.1**	52 – 112	≤ 40
Benzo(b)fluoranthene	0.027	**0.050**	**0.1**	49 – 123	≤ 40
Benzo(k)fluoranthene	0.027	**0.050**	**0.1**	50 – 127	≤ 40
Benzo(a)pyrene	0.059	**0.075**	**0.1**	24 – 118	≤ 40
Indeno(1,2,3-cd)pyrene	0.029	**0.050**	**0.1**	32 – 123	≤ 40
Dibenz(a,h)anthracene	0.042	**0.050**	**0.1**	30 – 127	≤ 40
Benzo(g,h,i)perylene	0.030	**0.050**	**0.1**	26 – 124	≤ 40
1-Methylnaphthalene	0.016	**0.050**	**0.1**	30 – 160[7]	≤ 40
Perylene	0.061	**0.075**	**0.1**	30 – 160[7]	≤ 40
Surrogate Standard Recovery			**MB / LCS**	**Samples**	**RPD**
2-Methylnapthalene-d_{10}			40 – 110	33 – 107	≤ 40
Dibenzo(a,h)anthracene-d_{14}			33 – 140	**10** – 142	≤ 40

(1) Detection Limit (DL) as defined in ARI SOP 1018S
(2) Limit of Detection (LOD) as defined in ARI SOP 1018S
(3) Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(4) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
(5) Control limits calculated using all data from 6/1/10 through 5/31/11.
(6) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

(7) Default limits pending generation of historic limits for total benzofluoranthenes and 1-Methylnaphthalene.

Chlorinated Phenols
DL, LOD, LOQ and Control Limit Summary [1]
EPA Method 8041A

Analyte	Aqueous Samples [2,3]				Solid Samples [2,4]				RPD [5]
	DL µg/L	LOD µg/L	LOQ µg/L	LCS Recovery [6]	DL µg/kg	LOD µg/kg	LOQ µg/kg	LCS Recovery [6]	
Pentachlorophenol (PCP)	0.085	**0.13**	**0.25**	48 – 116%	0.83	**3.13**	**6.25**	56 – 111%	≤ 40
2,4,6-Trichlorophenol	0.106	**0.13**	**0.25**	30 – 160%	1.21	**3.13**	**6.25**	30 – 160%	≤ 40
2,3,6-Trichlorophenol	0.066	**0.13**	**0.25**	30 – 160%	2.96	**3.13**	**6.25**	30 – 160%	≤ 40
2,4,5-Trichlorophenol	0.077	**0.13**	**0.25**	30 – 160%	2.24	**3.13**	**6.25**	30 – 160%	≤ 40
2,3,4-Trichlorophenol	0.126	**0.13**	**0.25**	30 – 160%	1.67	**3.13**	**6.25**	30 – 160%	≤ 40
2,3,5,6-Tetrachlorophenol	0.091	**0.13**	**0.25**	30 – 160%	1.61	**3.13**	**6.25**	30 – 160%	≤ 40
2,3,4,5-Tetrachlorophenol	0.077	**0.13**	**0.25**	30 – 160%	1.26	**3.13**	**6.25**	30 – 160%	≤ 40
2,4-Dichlorophenol	1.510	**3.0**	**6.0**	30 – 160%	16.6	**31.3**	**62.5**	30 – 160%	≤ 40
Pentachlorophenol (PCP)(low level prep)	0.014 [7]	**0.013**	**0.025**	36 – 159%					≤ 40
Surrogate % Recovery	**MB / LCS**	**Sample**			**MB / LCS**	**Sample**			
2,4,6-Tribromophenol	41 – 98	26 – 113			39 – 99	**10** – 129 [8]			≤ 40
2,4,6-Tribromophenol (low level preparation)	33 – 151	**10** – 181 [8]							≤ 40

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation as defined in ARI SOP 1018S
(2) Control limits calculated using all data from 1/1/10 through 8/1/11.
(3) Separatory funnel extraction (EPA Method 3510C) 500 mL sample to 50 mL final volume (5 mL for low level Prep)
(4) Microwave assisted extraction (EPA Method 3546) 10 g sample to 25 mL final volume
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

(6) 30 – 160 are default values used when there is insufficient data to calculate historic control limits.
(7) MDL study QS97 (4/30/10)
(8) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.

DL[1], LOD[1], LOQ[1] and Control Limits Summary
Analysis of Water Samples for Chlorinated Pesticides
EPA Method 8081B

Separatory Funnel (EPA Method 3510C) Extraction using 500 mL sample with extract concentrated to 5 mL final volume. ARI Bench Sheet 3038F

LOD Spike level = LOQ Concentration

Analyte	DL[1,2] µg/L	LOD[1] µg/L	LOQ[1] µg/L	LCS Control Limit[3,4]	Replicate RPD[5]
alpha-BHC	0.0085	0.025	**0.05**	51 – 120	≤ 40
beta-BHC	0.0098	0.025	**0.05**	44 – 134	≤ 40
gamma-BHC (Lindane)	0.0159	0.025	**0.05**	59 – 131	≤ 40
delta-BHC	0.0087	0.025	**0.05**	44 – 156	≤ 40
Heptachlor	0.0113	0.025	**0.05**	47 – 110	≤ 40
Aldrin	0.0103	0.025	**0.05**	47 – 106	≤ 40
Heptachlor Epoxide	0.0079	0.025	**0.05**	62 – 121	≤ 40
trans-Chlordane (*beta*-Chlordane, *gamma*-Chlordane)	0.0082	0.025	**0.05**	63 – 125	≤ 40
cis-Chlordane (*alpha*-chlordane)	0.0082	0.025	**0.05**	62 – 123	≤ 40
Endosulfan I	0.0089	0.025	**0.05**	**10** – 110	≤ 40
4,4'-DDE	0.0184	0.05	**0.10**	61 – 138	≤ 40
Dieldrin	0.0168	0.05	**0.10**	64 – 123	≤ 40
Endrin	0.0167	0.05	**0.10**	53 – 127	≤ 40
Endosulfan II	0.0139	0.05	**0.10**	23 – 102	≤ 40
4,4'-DDD	0.0186	0.05	**0.10**	53 – 133	≤ 40
Endrin Aldehyde	0.0163	0.05	**0.10**	28 – 107	≤ 40
4,4'-DDT	0.0169	0.05	**0.10**	49 – 127	≤ 40
Endosulfan Sulfate	0.0235	0.05	**0.10**	49 – 121	≤ 40
Endrin Ketone	0.0151	0.05	**0.10**	45 – 126	≤ 40
Methoxychlor	0.0744	0.25	**0.50**	48 – 118	≤ 40
Hexachlorobutadiene	0.0123	0.05	**0.10**	23 – **100**	≤ 40
Hexachlorobenzene	0.0101	0.05	**0.10**	44 – 101	≤ 40
Surrogate Standard Recovery			**MB / LCS**	**Samples**	**RPD**
Tetrachloro-*m*-xylene (TCMX)			38 – 103	30 – 105	≤ 40
Decachlorobiphenyl			37 – 125	11 – 144	≤ 40

(1) Detection Limit (DL), Limit of Detection (LOD) and Limit of Quantitation as defined in ARI SOP 1018S.
(2) MDL study QD48
(3) Highlighted control limits (**bold font**) are adjusted from the calculated values to reflect that ARI does not use control limits < 10 for the lower limit or < 100 for the upper limit.
(4) Control limits calculated using all data from 1/1/12 through 7/31/12.
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then

$$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

Quality Control Parameters for Metals Analysis-ICP-OES 200.7/6010C

	Aqueous Samples[2]			Spike Recovery		RPD[5]	Solids[3]	Tissue[4]
Analyte	DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	Matrix Spike	LCS		LOQ mg/kg	LOQ mg/kg
Aluminum	7.57	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Antimony	6.28	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Arsenic	3.33	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Barium	1.33	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Beryllium	0.16	0.5	**1.0**	75 – 125	80 – 120	≤ 20	**0.1**	**0.02**
Boron	7.39	10	**20**	75 – 125	80 – 120	≤ 20	**2.0**	**0.4**
Cadmium	0.18	0.5	**2.0**	75 – 125	80 – 120	≤ 20	**0.2**	**0.04**
Calcium	11.27	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Chromium	1.24	2.5	**5.0**	75 – 125	80 – 120	≤ 20	**0.5**	**0.1**
Cobalt	0.27	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Copper	0.92	1.0	**2.0**	75 – 125	80 – 120	≤ 20	**0.2**	**0.04**
Iron	7.50	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Lead	1.55	10	**20**	75 – 125	80 – 120	≤ 20	**2.0**	**0.4**
Magnesium	9.61	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Manganese	0.28	0.5	**1.0**	75 – 125	80 – 120	≤ 20	**0.1**	**0.02**
Molybdenum	0.79	2.5	**5.0**	75 – 125	80 – 120	≤ 20	**0.5**	**0.1**
Nickel	3.86	5.0	**10**	75 – 125	80 – 120	≤ 20	**1.0**	**0.2**
Potassium	65.70	250	**500**	75 – 125	80 – 120	≤ 20	**50**	**10**
Selenium	4.99	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Silicon	8.17	30	**60**	75 – 125	80 – 120	≤ 20	**(6)**	**(6)**
Silver	0.43	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Sodium	11.35	250	**500**	75 – 125	80 – 120	≤ 20	**50**	**10**
Strontium	0.09	1.0	**1.0**	75 – 125	80 – 120	≤ 20	**0.1**	**0.02**
Thallium	3.10	25	**50**	75 – 125	80 – 120	≤ 20	**5.0**	**1.0**
Tin	1.41	5.0	**10**	75 – 125	80 – 120	≤ 20	**1.0**	**0.2**
Titanium	2.11	2.5	**5.0**	75 – 125	80 – 120	≤ 20	**0.5**	**0.01**
Vanadium	0.27	1.5	**3.0**	75 – 125	80 – 120	≤ 20	**0.3**	**0.06**
Zinc	1.45	5.0	**10**	75 – 125	80 – 120	≤ 20	**1.0**	**0.2**

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 50 mL sample and 50 mL final volume
(3) Solids LOQ based on 100% solids using 1.0 g sample with 100 mL final volume.
(4) Tissue is reported on an "as received" (wet weight) basis using 2.5 g sample with 50 mL final volume.
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$
(6) ARI does not analyze for Silicon in solids or tissue samples

Quality Control Parameters for Metals Analysis ICP-MS 200.8/6020A

Analyte	Mass	Aqueous Samples[2]			Spike Recovery		RPD[4]	Solids[3]
		DL[1] µg/L	LOD[1] µg/L	LOQ[1] µg/L	Matrix Spike	LCS		LOQ[1] mg/kg
Aluminum	27	1.601	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Antimony	121	0.010	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
	123	0.011	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Arsenic #1	75	0.048	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Arsenic #2	75	0.092	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Barium	135	0.020	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	137	0.019	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Beryllium	9	0.021	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Cadmium	111	0.010	0.05	**0.1**	75 – 125	80 – 120	≤ 20	**0.1**
	114	0.005	0.05	**0.1**	75 – 125	80 – 120	≤ 20	**0.1**
Calcium	43	3.983	25	**50.0**	75 – 125	80 – 120	≤ 20	**50.0**
Chromium	52	0.045	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	53	0.118	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Cobalt	59	0.011	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Copper	63	0.158	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	65	0.236	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Iron	54	5.753	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
	57	3.876	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Lead	208	0.046	0.05	**0.1**	75 – 125	80 – 120	≤ 20	**0.1**
Magnesium	24	0.297	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Manganese	55	0.022	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Molybdenum	98	0.013	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Nickel	60	0.079	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	62	0.089	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
Potassium	39	2.944	10	**20.0**	75 – 125	80 – 120	≤ 20	**20.0**
Selenium	82	0.127	0.25	**0.5**	75 – 125	80 – 120	≤ 20	**0.5**
	78	0.324	0.25	**2.0**	75 – 125	80 – 120	≤ 20	**2.0**
Silver	107	0.008	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Sodium	23	2.833	50	**100.0**	75 – 125	80 – 120	≤ 20	**100.0**
Thorium[5]	232	0.013	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Thallium	205	0.004	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Uranium[5]	238	0.003	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Vanadium	51	0.043	0.1	**0.2**	75 – 125	80 – 120	≤ 20	**0.2**
Zinc	66	0.497	2	**4.0**	75 – 125	80 – 120	≤ 20	**4.0**
	67	0.531	2	**4.0**	75 – 125	80 – 120	≤ 20	**4.0**
	68	0.524	2	**4.0**	75 – 125	80 – 120	≤ 20	**4.0**

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 50 mL sample and 50 mL final volume
(3) Solids LOQ based on 100% solids using 1.0 g sample with 100 mL final volume.
(4) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $$RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$$

(5) ARI has no accreditation for these elements.

Quality Control Parameters for Mercury Analysis using CVAA						
	Aqueous Samples[2]			**Spike Recovery**		**RPD[5]**
	DL[1] µg/L	**LOD[1] µg/L**	**LOQ[1] µg/L**	**Matrix Spike**	**LCS**	
Mercury	0.0069	0.05	**0.10[2]**	75 – 125	80 – 120	≤ 20
Mercury (low level)	0.0026	0.01	**0.02[2]**	75 – 125	80 – 120	≤ 20
	Soil / Sediment Samples			**Spike Recovery**		**RPD[5]**
	DL[1] mg/kg	**LOD[1] mg/kg**	**LOQ[1] mg/kg**	**Matrix Spike**	**LCS**	
Mercury	0.0021	0.0125	0.025[3]	75 – 125	80 – 120	≤ 20
	Tissue Samples			**Spike Recovery**		**RPD[5]**
	DL[1] mg/kg	**LOD[1] mg/kg**	**LOQ[1] mg/kg**	**Matrix Spike**	**LCS**	
Mercury	0.0021	0.0125	0.005[4]	75 – 125	80 – 120	≤ 20

(1) Detection Limit (DL), Limit of Detection Limit (LOD) and Limit of Quantitation (LOQ) as defined in ARI SOP 1018S
(2) 20 mL sample with 20 mL final volume
(3) 0.2 g sample with 50 mL final volume assuming 100% dry weight. Soil and sediment are reported on a dry weight basis.
(4) Tissue LOQ is 0.005 mg/kg as received (wet weight) based on 1 g sample with 50 mL final volume.
(5) Relative Percent Difference between analytes in replicate analyzes. If C_O and C_D are the concentrations of the original and duplicate respectively then $RPD = \frac{|C_O - C_D|}{\frac{C_O + C_D}{2}} x100$

Analytical Resources,Incorporated
Analytical Chemists and Consultants

Spike Recovery Control Limits for Conventional Wet Chemistry

Effective 5/1/09

Control limits are updated periodically. Assure that you have ARI's current control limits by downloading the files at the time of use. http://www.arilabs.com/portal/downloads/ARI-CLs.zip

	ARI's Control Limits	
Sample Matrix:	Water	Soil / Sediment
Matrix Spike Recoveries	% Recovery	% Recovery
Ammonia	75 - 125	75 - 125
Bromide	75 125	75 - 125
Chloride	75 125	75 - 125
Cyanide	75 - 125	75 - 125
Ferrous Iron	75 - 125	75 - 125
Fluoride	75 - 125	75 - 125
Formaldehyde	75 - 125	75 - 125
Hexane Extractable Material	-- - --	78 - 114
Hexavalent Chromium	75 - 125	75 - 125
Nitrate/Nitrite	75 - 125	75 - 125
Oil and Grease	75 - 125	75 - 125
Phenol	75 - 125	75 - 125
Phosphorous	75 - 125	75 - 125
Sulfate	75 - 125	75 - 125
Sulfide	75 - 125	75 - 125
Total Kjeldahl Nitrogen	75 - 125	75 - 125
Total Organic Carbon	75 - 125	75 - 125
Duplicate RPDs		
Acidity	±20%	±20%
Alkalinity	±20%	±20%
BOD	±20%	±20%
Cation Exchange	±20%	±20%
COD	±20%	±20%
Conductivity	±20%	±20%
Salinity	±20%	±20%
Solids	±20%	±20%
Turbidity	±20%	±20%

Semivolatile Analysis
Report and Summary QC Forms

ARI Job ID: VR80

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3520C
Page 1 of 2

Sample ID: HT-01-W-C-121107
SAMPLE

Lab Sample ID: VR80A
LIMS ID: 12-22456
Matrix: Water
Data Release Authorized:
Reported: 11/19/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
NA
Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/13/12
Date Analyzed: 11/16/12 19:19
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
108-95-2	Phenol	0.52	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	0.36	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	0.40	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	0.36	1.0	< 1.0 U
95-48-7	2-Methylphenol	0.53	1.0	< 1.0 U
106-44-5	4-Methylphenol	0.52	2.0	< 2.0 U
67-72-1	Hexachloroethane	0.35	2.0	< 2.0 U
105-67-9	2,4-Dimethylphenol	0.36	3.0	< 3.0 U
65-85-0	Benzoic Acid	5.1	20	< 20 U
120-82-1	1,2,4-Trichlorobenzene	0.38	1.0	< 1.0 U
91-20-3	Naphthalene	0.52	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	0.31	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	0.48	1.0	< 1.0 U
131-11-3	Dimethylphthalate	0.53	1.0	< 1.0 U
208-96-8	Acenaphthylene	0.48	1.0	< 1.0 U
83-32-9	Acenaphthene	0.55	1.0	< 1.0 U
132-64-9	Dibenzofuran	0.48	1.0	< 1.0 U
84-66-2	Diethylphthalate	0.58	1.0	< 1.0 U
86-73-7	Fluorene	0.56	1.0	< 1.0 U
86-30-6	N-Nitrosodiphenylamine	0.46	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	0.47	1.0	< 1.0 U
87-86-5	Pentachlorophenol	2.4	10	< 10 U
85-01-8	Phenanthrene	0.56	1.0	< 1.0 U
120-12-7	Anthracene	0.53	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	0.54	1.0	< 1.0 U
206-44-0	Fluoranthene	0.52	1.0	< 1.0 U
129-00-0	Pyrene	0.55	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	0.56	1.0	< 1.0 U
56-55-3	Benzo(a)anthracene	0.52	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.9	3.0	< 3.0 U
218-01-9	Chrysene	0.55	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	0.51	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	0.48	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.48	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	0.48	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	0.55	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	0.48	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	0.48	5.0	< 5.0 U

Lab Sample ID: VR80A
LIMS ID: 12-22456
Matrix: Water
Date Analyzed: 11/16/12 19:19

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
NA

CAS Number	Analyte	DL	LOQ	Result

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	78.0%	2-Fluorobiphenyl	79.2%
d14-p-Terphenyl	82.4%	d4-1,2-Dichlorobenzene	71.6%
d5-Phenol	74.7%	2-Fluorophenol	69.6%
2,4,6-Tribromophenol	91.2%	d4-2-Chlorophenol	76.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3520C

Sample ID: HT-04-W-C-121107
SAMPLE

Lab Sample ID: VR80B
LIMS ID: 12-22457
Matrix: Water
Data Release Authorized:
Reported: 11/19/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
NA
Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/13/12
Date Analyzed: 11/16/12 19:54
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
108-95-2	Phenol	0.52	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	0.36	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	0.40	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	0.36	1.0	< 1.0 U
95-48-7	2-Methylphenol	0.53	1.0	< 1.0 U
106-44-5	4-Methylphenol	0.52	2.0	< 2.0 U
67-72-1	Hexachloroethane	0.35	2.0	< 2.0 U
105-67-9	2,4-Dimethylphenol	0.36	3.0	< 3.0 U
65-85-0	Benzoic Acid	5.1	20	< 20 U
120-82-1	1,2,4-Trichlorobenzene	0.38	1.0	< 1.0 U
91-20-3	Naphthalene	0.52	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	0.31	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	0.48	1.0	< 1.0 U
131-11-3	Dimethylphthalate	0.53	1.0	< 1.0 U
208-96-8	Acenaphthylene	0.48	1.0	< 1.0 U
83-32-9	Acenaphthene	0.55	1.0	< 1.0 U
132-64-9	Dibenzofuran	0.48	1.0	< 1.0 U
84-66-2	Diethylphthalate	0.58	1.0	< 1.0 U
86-73-7	Fluorene	0.56	1.0	< 1.0 U
86-30-6	N-Nitrosodiphenylamine	0.46	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	0.47	1.0	< 1.0 U
87-86-5	Pentachlorophenol	2.4	10	< 10 U
85-01-8	Phenanthrene	0.56	1.0	< 1.0 U
120-12-7	Anthracene	0.53	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	0.54	1.0	< 1.0 U
206-44-0	Fluoranthene	0.52	1.0	< 1.0 U
129-00-0	Pyrene	0.55	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	0.56	1.0	< 1.0 U
56-55-3	Benzo(a)anthracene	0.52	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.9	3.0	< 3.0 U
218-01-9	Chrysene	0.55	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	0.51	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	0.48	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.48	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	0.48	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	0.55	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	0.48	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	0.48	5.0	< 5.0 U

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3520C

Sample ID: HT-04-W-C-121107
SAMPLE

Lab Sample ID: VR80B
LIMS ID: 12-22457
Matrix: Water
Date Analyzed: 11/16/12 19:54

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
NA

CAS Number	Analyte	DL	LOQ	Result

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	73.2%	2-Fluorobiphenyl	70.8%
d14-p-Terphenyl	66.8%	d4-1,2-Dichlorobenzene	68.4%
d5-Phenol	67.2%	2-Fluorophenol	65.3%
2,4,6-Tribromophenol	82.7%	d4-2-Chlorophenol	71.5%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3520C
Page 1 of 2

Sample ID: HT-04-W-C-dup-121107
SAMPLE

Lab Sample ID: VR80C
LIMS ID: 12-22458
Matrix: Water
Data Release Authorized:
Reported: 11/19/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
NA
Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/13/12
Date Analyzed: 11/16/12 20:28
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
108-95-2	Phenol	0.52	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	0.36	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	0.40	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	0.36	1.0	< 1.0 U
95-48-7	2-Methylphenol	0.53	1.0	< 1.0 U
106-44-5	4-Methylphenol	0.52	2.0	< 2.0 U
67-72-1	Hexachloroethane	0.35	2.0	< 2.0 U
105-67-9	2,4-Dimethylphenol	0.36	3.0	< 3.0 U
65-85-0	Benzoic Acid	5.1	20	< 20 U
120-82-1	1,2,4-Trichlorobenzene	0.38	1.0	< 1.0 U
91-20-3	Naphthalene	0.52	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	0.31	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	0.48	1.0	< 1.0 U
131-11-3	Dimethylphthalate	0.53	1.0	< 1.0 U
208-96-8	Acenaphthylene	0.48	1.0	< 1.0 U
83-32-9	Acenaphthene	0.55	1.0	< 1.0 U
132-64-9	Dibenzofuran	0.48	1.0	< 1.0 U
84-66-2	Diethylphthalate	0.58	1.0	< 1.0 U
86-73-7	Fluorene	0.56	1.0	< 1.0 U
86-30-6	N-Nitrosodiphenylamine	0.46	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	0.47	1.0	< 1.0 U
87-86-5	Pentachlorophenol	2.4	10	< 10 U
85-01-8	Phenanthrene	0.56	1.0	< 1.0 U
120-12-7	Anthracene	0.53	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	0.54	1.0	< 1.0 U
206-44-0	Fluoranthene	0.52	1.0	< 1.0 U
129-00-0	Pyrene	0.55	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	0.56	1.0	< 1.0 U
56-55-3	Benzo(a)anthracene	0.52	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.9	3.0	< 3.0 U
218-01-9	Chrysene	0.55	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	0.51	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	0.48	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.48	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	0.48	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	0.55	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	0.48	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	0.48	5.0	< 5.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3520C

Sample ID: HT-04-W-C-dup-121107
SAMPLE

Lab Sample ID: VR80C
LIMS ID: 12-22458
Matrix: Water
Date Analyzed: 11/16/12 20:28

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
NA

CAS Number	Analyte	DL	LOQ	Result

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	74.8%	2-Fluorobiphenyl	70.8%
d14-p-Terphenyl	73.6%	d4-1,2-Dichlorobenzene	62.8%
d5-Phenol	70.9%	2-Fluorophenol	69.9%
2,4,6-Tribromophenol	86.7%	d4-2-Chlorophenol	73.1%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3520C

Sample ID: WS-10-W-C-121107
SAMPLE

Lab Sample ID: VR80D
LIMS ID: 12-22459
Matrix: Water
Data Release Authorized:
Reported: 11/19/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
NA
Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/13/12
Date Analyzed: 11/16/12 21:02
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
108-95-2	Phenol	0.52	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	0.36	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	0.40	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	0.36	1.0	< 1.0 U
95-48-7	2-Methylphenol	0.53	1.0	< 1.0 U
106-44-5	4-Methylphenol	0.52	2.0	< 2.0 U
67-72-1	Hexachloroethane	0.35	2.0	< 2.0 U
105-67-9	2,4-Dimethylphenol	0.36	3.0	< 3.0 U
65-85-0	Benzoic Acid	5.1	20	< 20 U
120-82-1	1,2,4-Trichlorobenzene	0.38	1.0	< 1.0 U
91-20-3	Naphthalene	0.52	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	0.31	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	0.48	1.0	< 1.0 U
131-11-3	Dimethylphthalate	0.53	1.0	< 1.0 U
208-96-8	Acenaphthylene	0.48	1.0	< 1.0 U
83-32-9	Acenaphthene	0.55	1.0	< 1.0 U
132-64-9	Dibenzofuran	0.48	1.0	< 1.0 U
84-66-2	Diethylphthalate	0.58	1.0	< 1.0 U
86-73-7	Fluorene	0.56	1.0	< 1.0 U
86-30-6	N-Nitrosodiphenylamine	0.46	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	0.47	1.0	< 1.0 U
87-86-5	Pentachlorophenol	2.4	10	< 10 U
85-01-8	Phenanthrene	0.56	1.0	< 1.0 U
120-12-7	Anthracene	0.53	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	0.54	1.0	< 1.0 U
206-44-0	Fluoranthene	0.52	1.0	< 1.0 U
129-00-0	Pyrene	0.55	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	0.56	1.0	< 1.0 U
56-55-3	Benzo(a)anthracene	0.52	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.9	3.0	< 3.0 U
218-01-9	Chrysene	0.55	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	0.51	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	0.48	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.48	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	0.48	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	0.55	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	0.48	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	0.48	5.0	< 5.0 U

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS
Extraction Method: SW3520C

Sample ID: WS-10-W-C-121107
SAMPLE

Lab Sample ID: VR80D
LIMS ID: 12-22459
Matrix: Water
Date Analyzed: 11/16/12 21:02

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
NA

CAS Number	Analyte	DL	LOQ	Result

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	76.0%	2-Fluorobiphenyl	76.4%
d14-p-Terphenyl	85.2%	d4-1,2-Dichlorobenzene	68.8%
d5-Phenol	70.7%	2-Fluorophenol	68.3%
2,4,6-Tribromophenol	89.6%	d4-2-Chlorophenol	73.9%

ANALYTICAL RESOURCES INCORPORATED

SW8270 SEMIVOLATILES WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Client ID	NBZ	FBP	TPH	DCB	PHL	2FP	TBP	2CP	TOT OUT
MB-111312	75.6%	74.0%	92.0%	67.2%	73.1%	68.3%	86.4%	75.5%	0
LCS-111312	77.6%	81.6%	93.6%	64.0%	73.9%	64.8%	107%	73.6%	0
LCSD-111312	80.8%	84.0%	96.8%	68.4%	79.5%	71.7%	109%	78.4%	0
HT-01-W-C-121107	78.0%	79.2%	82.4%	71.6%	74.7%	69.6%	91.2%	76.8%	0
HT-04-W-C-121107	73.2%	70.8%	66.8%	68.4%	67.2%	65.3%	82.7%	71.5%	0
HT-04-W-C-dup-1211	74.8%	70.8%	73.6%	62.8%	70.9%	69.9%	86.7%	73.1%	0
WS-10-W-C-121107	76.0%	76.4%	85.2%	68.8%	70.7%	68.3%	89.6%	73.9%	0

	LCS/MB LIMITS	QC LIMITS
(NBZ) = d5-Nitrobenzene	(50-100)	(34-101)
(FBP) = 2-Fluorobiphenyl	(51-100)	(38-100)
(TPH) = d14-p-Terphenyl	(54-117)	(27-122)
(DCB) = d4-1,2-Dichlorobenzene	(40-100)	(27-100)
(PHL) = d5-Phenol	(15-121)	(16-106)
(2FP) = 2-Fluorophenol	(33-100)	(23-100)
(TBP) = 2,4,6-Tribromophenol	(46-125)	(31-128)
(2CP) = d4-2-Chlorophenol	(46-102)	(33-100)

Prep Method: SW3520C
Log Number Range: 12-22456 to 12-22459

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS

Sample ID: LCS-111312
LCS/LCSD

Lab Sample ID: LCS-111312
LIMS ID: 12-22456
Matrix: Water
Data Release Authorized:
Reported: 11/19/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted LCS/LCSD: 11/13/12

Date Analyzed LCS: 11/16/12 18:10
LCSD: 11/16/12 18:44

Instrument/Analyst LCS: NT6/JZ
LCSD: NT6/JZ

GPC Cleanup: NO

Sample Amount LCS: 500 mL
LCSD: 500 mL

Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL

Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Phenol	18.7	25.0	74.8%	20.3	25.0	81.2%	8.2%
1,3-Dichlorobenzene	14.2	25.0	56.8%	15.5	25.0	62.0%	8.8%
1,4-Dichlorobenzene	14.7	25.0	58.8%	16.1	25.0	64.4%	9.1%
Benzyl Alcohol	16.1	25.0	64.4%	16.7	25.0	66.8%	3.7%
1,2-Dichlorobenzene	14.8	25.0	59.2%	16.3	25.0	65.2%	9.6%
2-Methylphenol	18.7	25.0	74.8%	19.9	25.0	79.6%	6.2%
4-Methylphenol	39.5	50.0	79.0%	41.2	50.0	82.4%	4.2%
Hexachloroethane	13.9	25.0	55.6%	15.1	25.0	60.4%	8.3%
2,4-Dimethylphenol	50.8	75.0	67.7%	54.1	75.0	72.1%	6.3%
Benzoic Acid	126	138	91.3%	132	138	95.7%	4.7%
1,2,4-Trichlorobenzene	15.5	25.0	62.0%	16.8	25.0	67.2%	8.0%
Naphthalene	16.5	25.0	66.0%	17.3	25.0	69.2%	4.7%
Hexachlorobutadiene	14.3	25.0	57.2%	15.8	25.0	63.2%	10.0%
2-Methylnaphthalene	15.9	25.0	63.6%	16.8	25.0	67.2%	5.5%
Dimethylphthalate	23.2	25.0	92.8%	23.2	25.0	92.8%	0.0%
Acenaphthylene	19.4	25.0	77.6%	19.9	25.0	79.6%	2.5%
Acenaphthene	18.3	25.0	73.2%	18.9	25.0	75.6%	3.2%
Dibenzofuran	18.1	25.0	72.4%	18.5	25.0	74.0%	2.2%
Diethylphthalate	23.1	25.0	92.4%	23.1	25.0	92.4%	0.0%
Fluorene	19.3	25.0	77.2%	19.9	25.0	79.6%	3.1%
N-Nitrosodiphenylamine	18.5	25.0	74.0%	19.2	25.0	76.8%	3.7%
Hexachlorobenzene	19.2	25.0	76.8%	20.5	25.0	82.0%	6.5%
Pentachlorophenol	58.9	75.0	78.5%	62.4	75.0	83.2%	5.8%
Phenanthrene	19.5	25.0	78.0%	20.3	25.0	81.2%	4.0%
Anthracene	18.6	25.0	74.4%	19.5	25.0	78.0%	4.7%
Di-n-Butylphthalate	22.3	25.0	89.2%	23.3	25.0	93.2%	4.4%
Fluoranthene	20.8	25.0	83.2%	22.2	25.0	88.8%	6.5%
Pyrene	18.6	25.0	74.4%	19.5	25.0	78.0%	4.7%
Butylbenzylphthalate	21.2	25.0	84.8%	22.2	25.0	88.8%	4.6%
Benzo(a)anthracene	20.0	25.0	80.0%	21.4	25.0	85.6%	6.8%
bis(2-Ethylhexyl)phthalate	20.8	25.0	83.2%	21.1	25.0	84.4%	1.4%
Chrysene	19.7	25.0	78.8%	20.9	25.0	83.6%	5.9%
Di-n-Octyl phthalate	20.4	25.0	81.6%	21.3	25.0	85.2%	4.3%
Benzo(a)pyrene	17.6	25.0	70.4%	18.6	25.0	74.4%	5.5%
Indeno(1,2,3-cd)pyrene	16.0	25.0	64.0%	16.3	25.0	65.2%	1.9%
Dibenz(a,h)anthracene	17.1	25.0	68.4%	17.4	25.0	69.6%	1.7%
Benzo(g,h,i)perylene	16.1	25.0	64.4%	16.1	25.0	64.4%	0.0%
1-Methylnaphthalene	22.2	25.0	88.8%	23.3	25.0	93.2%	4.8%
Total Benzofluoranthenes	38.5	50.0	77.0%	40.1	50.0	80.2%	4.1%

Semivolatile Surrogate Recovery

	LCS	LCSD
d5-Nitrobenzene	77.6%	80.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: LCS-111312**
 LCS/LCSD

Lab Sample ID: LCS-111312 QC Report No: VR80-Anchor QEA, LLC
LIMS ID: 12-22456 Project: City of Kenmore
Matrix: Water
Date Analyzed LCS: 11/16/12 18:10
LCSD: 11/16/12 18:44

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
2-Fluorobiphenyl			81.6%	84.0%			
d14-p-Terphenyl			93.6%	96.8%			
d4-1,2-Dichlorobenzene			64.0%	68.4%			
d5-Phenol			73.9%	79.5%			
2-Fluorophenol			64.8%	71.7%			
2,4,6-Tribromophenol			107%	109%			
d4-2-Chlorophenol			73.6%	78.4%			

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

VR80MBW1

Lab Name: ANALYTICAL RESOURCES INC

Client: ANCHOR QEA, LLC

ARI Job No: VR80

Project: CITY OF KENMORE

Lab File ID: 11161215

Date Extracted: 11/13/12

Instrument ID: NT6

Date Analyzed: 11/16/12

Matrix: LIQUID

Time Analyzed: 1735

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	VR80LCSW1	VR80LCSW1	11161216	11/16/12
02	VR80LCSDW1	VR80LCSDW1	11161217	11/16/12
03	HT-01-W-C-121107	VR80A	11161218	11/16/12
04	HT-04-W-C-121107	VR80B	11161219	11/16/12
05	HT-04-W-C-DUP-12	VR80C	11161220	11/16/12
06	WS-10-W-C-121107	VR80D	11161221	11/16/12
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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Semivolatiles by SW8270D GC/MS **Sample ID: MB-111312**
Extraction Method: SW3520C **METHOD BLANK**

Lab Sample ID: MB-111312
LIMS ID: 12-22456
Matrix: Water
Data Release Authorized:
Reported: 11/19/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
NA
Date Sampled: NA
Date Received: NA

Date Extracted: 11/13/12
Date Analyzed: 11/16/12 17:35
Instrument/Analyst: NT6/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
108-95-2	Phenol	0.52	1.0	< 1.0 U
541-73-1	1,3-Dichlorobenzene	0.36	1.0	< 1.0 U
106-46-7	1,4-Dichlorobenzene	0.40	1.0	< 1.0 U
100-51-6	Benzyl Alcohol	2.0	2.0	< 2.0 U
95-50-1	1,2-Dichlorobenzene	0.36	1.0	< 1.0 U
95-48-7	2-Methylphenol	0.53	1.0	< 1.0 U
106-44-5	4-Methylphenol	0.52	2.0	< 2.0 U
67-72-1	Hexachloroethane	0.35	2.0	< 2.0 U
105-67-9	2,4-Dimethylphenol	0.36	3.0	< 3.0 U
65-85-0	Benzoic Acid	5.1	20	< 20 U
120-82-1	1,2,4-Trichlorobenzene	0.38	1.0	< 1.0 U
91-20-3	Naphthalene	0.52	1.0	< 1.0 U
87-68-3	Hexachlorobutadiene	0.31	3.0	< 3.0 U
91-57-6	2-Methylnaphthalene	0.48	1.0	< 1.0 U
131-11-3	Dimethylphthalate	0.53	1.0	< 1.0 U
208-96-8	Acenaphthylene	0.48	1.0	< 1.0 U
83-32-9	Acenaphthene	0.55	1.0	< 1.0 U
132-64-9	Dibenzofuran	0.48	1.0	< 1.0 U
84-66-2	Diethylphthalate	0.58	1.0	< 1.0 U
86-73-7	Fluorene	0.56	1.0	< 1.0 U
86-30-6	N-Nitrosodiphenylamine	0.46	1.0	< 1.0 U
118-74-1	Hexachlorobenzene	0.47	1.0	< 1.0 U
87-86-5	Pentachlorophenol	2.4	10	< 10 U
85-01-8	Phenanthrene	0.56	1.0	< 1.0 U
120-12-7	Anthracene	0.53	1.0	< 1.0 U
84-74-2	Di-n-Butylphthalate	0.54	1.0	< 1.0 U
206-44-0	Fluoranthene	0.52	1.0	< 1.0 U
129-00-0	Pyrene	0.55	1.0	< 1.0 U
85-68-7	Butylbenzylphthalate	0.56	1.0	< 1.0 U
56-55-3	Benzo(a)anthracene	0.52	1.0	< 1.0 U
117-81-7	bis(2-Ethylhexyl)phthalate	1.9	3.0	< 3.0 U
218-01-9	Chrysene	0.55	1.0	< 1.0 U
117-84-0	Di-n-Octyl phthalate	0.51	1.0	< 1.0 U
50-32-8	Benzo(a)pyrene	0.48	1.0	< 1.0 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.48	1.0	< 1.0 U
53-70-3	Dibenz(a,h)anthracene	0.48	1.0	< 1.0 U
191-24-2	Benzo(g,h,i)perylene	0.55	1.0	< 1.0 U
90-12-0	1-Methylnaphthalene	0.48	1.0	< 1.0 U
TOTBFA	Total Benzofluoranthenes	0.48	5.0	< 5.0 U

Lab Sample ID: MB-111312 QC Report No: VR80-Anchor QEA, LLC
LIMS ID: 12-22456 Project: City of Kenmore
Matrix: Water NA
Date Analyzed: 11/16/12 17:35

CAS Number	Analyte	DL	LOQ	Result

Reported in µg/L (ppb)

Semivolatile Surrogate Recovery

d5-Nitrobenzene	75.6%	2-Fluorobiphenyl	74.0%
d14-p-Terphenyl	92.0%	d4-1,2-Dichlorobenzene	67.2%
d5-Phenol	73.1%	2-Fluorophenol	68.3%
2,4,6-Tribromophenol	86.4%	d4-2-Chlorophenol	75.5%

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA,LLC

Instrument ID: NT6 Project: CITY OF KENMORE

DFTPP Injection Date: 10/19/12 DFTPP Injection Time: 1620

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	38.6
68	Less than 2.0% of mass 69	0.4 (1.0)1
69	Mass 69 relative abundance	39.3
70	Less than 2.0% of mass 69	0.3 (0.8)1
127	10.0 - 80.0% of mass 198	49.1
197	Less than 2.0% of mass 198	0.2
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.5
275	10.0 - 60.0% of mass 198	23.3
365	Greater than 1.0% of mass 198	2.98
441	0.0 - 24.0% of mass 442	11.2 (13.6)2
442	50.0 - 200.0% of mass 198	81.9
443	15.0 - 24.0% of mass 442	14.7 (17.9)2

1-Value is % mass 69 2-Value is % mass 442

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	IC251019	IC251019	10191201	10/19/12	1620
02	IC021019	IC021019	10191202	10/19/12	1654
03	IC11019	IC11019	10191203	10/19/12	1728
04	IC51019	IC51019	10191204	10/19/12	1803
05	IC101019	IC101019	10191205	10/19/12	1837
06	IC401019	IC401019	10191206	10/19/12	1912
07	IC601019	IC601019	10191207	10/19/12	1946
08	IC801019	IC801019	10191208	10/19/12	2020
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA,LLC

Instrument ID: NT6 Project: CITY OF KENMORE

DFTPP Injection Date: 11/16/12 DFTPP Injection Time: 0931

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	43.7
68	Less than 2.0% of mass 69	0.5 (1.1)1
69	Mass 69 relative abundance	41.3
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	10.0 - 80.0% of mass 198	48.9
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.8
275	10.0 - 60.0% of mass 198	23.6
365	Greater than 1.0% of mass 198	2.84
441	0.0 - 24.0% of mass 442	11.3 (14.3)2
442	50.0 - 200.0% of mass 198	78.8
443	15.0 - 24.0% of mass 442	15.4 (19.6)2

1-Value is % mass 69 2-Value is % mass 442

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC1116	CC1116	11161201	11/16/12	0931
02	VR80MBW1	VR80MBW1	11161215	11/16/12	1735
03	VR80LCSW1	VR80LCSW1	11161216	11/16/12	1810
04	VR80LCSDW1	VR80LCSDW1	11161217	11/16/12	1844
05	HT-01-W-C-121107	VR80A	11161218	11/16/12	1919
06	HT-04-W-C-121107	VR80B	11161219	11/16/12	1954
07	HT-04-W-C-DUP-12	VR80C	11161220	11/16/12	2028
08	WS-10-W-C-121107	VR80D	11161221	11/16/12	2102
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6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA,LLC

ARI Job No: VR80 Project: CITY OF KENMORE

Instrument ID: NT6 Calibration Date: 10/19/12

LAB FILE ID: RRF1 =10191203 RRF5 =10191204 RRF10 =10191205
RRF25 =10191201 RRF40 =10191206 RRF60 =10191207
RRF80 =10191208 RRF0.2=10191202

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	RRF 0.2	___ RRF	%RSD /R^2
Phenol	2.003	1.950	1.786	1.643	1.616	1.499	1.620		1.731	10.9
Bis(2-Chloroethyl)ether	1.557	1.598	1.386	1.325	1.320	1.204	1.200		1.370	11.5
2-Chlorophenol	1.651	1.627	1.487	1.378	1.378	1.245	1.270		1.434	11.2
1,3-Dichlorobenzene	1.784	1.874	1.671	1.597	1.541	1.387	1.391		1.606	11.5
1,4-Dichlorobenzene	1.746	1.853	1.648	1.579	1.542	1.362	1.359		1.584	11.7
1,2-Dichlorobenzene	1.737	1.772	1.566	1.498	1.445	1.257	1.293		1.510	13.2
Benzyl alcohol	1.208	1.305	1.082	1.192	1.116	1.061	1.091		1.151	7.6
2,2'-oxybis(1-Chloropropane)	2.221	2.277	1.992	1.873	1.852	1.628	1.608		1.922	13.7
2-Methylphenol	1.463	1.529	1.364	1.252	1.271	1.150	1.127		1.308	11.6
Hexachloroethane	0.696	0.715	0.638	0.622	0.620	0.566	0.567		0.632	9.1
N-Nitroso-di-n-propylamine	1.041	1.143	0.987	0.932	0.937	0.877	0.870		0.970	10.0
4-Methylphenol	1.466	1.580	1.418	1.308	1.313	1.178	1.175		1.348	11.1
Nitrobenzene	0.480	0.483	0.430	0.407	0.385	0.352	0.350		0.412	13.3
Isophorone	0.704	0.743	0.651	0.628	0.600	0.571	0.568		0.638	10.4
2-Nitrophenol	0.199	0.220	0.208	0.204	0.205	0.200	0.200		0.205	3.6
2,4-Dimethylphenol	0.430	0.421	0.380	0.361	0.352	0.328	0.329		0.372	11.1
Bis(2-Chloroethoxy)methane	0.513	0.535	0.468	0.447	0.428	0.404	0.394		0.456	11.7
2,4-Dichlorophenol	0.325	0.348	0.319	0.311	0.301	0.282	0.280		0.309	7.9
1,2,4-Trichlorobenzene	0.394	0.404	0.355	0.355	0.334	0.318	0.312		0.353	10.1
Naphthalene	1.408	1.412	1.262	1.142	1.022	0.828			1.179	19.4
Benzoic acid	0.154	0.240	0.248	0.277	0.289	0.289	0.297		0.256	19.5
4-Chloroaniline	0.660	0.631	0.537	0.522	0.413	0.343	0.296		0.486	0.995
Hexachlorobutadiene	0.232	0.241	0.214	0.217	0.204	0.196	0.195		0.214	8.2
4-Chloro-3-methylphenol	0.300	0.336	0.308	0.302	0.298	0.280	0.284		0.301	6.1
2-Methylnaphthalene	0.834	0.793	0.675	0.705	0.626	0.551	0.531		0.674	17.0
Hexachlorocyclopentadiene	0.296	0.404	0.356	0.388	0.386	0.408	0.385		0.375	10.3
2,4,6-Trichlorophenol	0.392	0.402	0.390	0.380	0.376	0.371	0.376		0.384	2.9
2,4,5-Trichlorophenol	0.374	0.419	0.408	0.410	0.407	0.404	0.398		0.403	3.5
2-Chloronaphthalene	1.388	1.344	1.180	1.095	1.002	0.912	0.892		1.116	17.7
2-Nitroaniline	0.409	0.452	0.406	0.445	0.422	0.416	0.408		0.422	4.5
Acenaphthylene	2.373	2.436	2.158	1.956	1.785	1.511	1.474		1.956	19.9
Dimethylphthalate	1.329	1.412	1.260	1.208	1.154	1.070	1.098		1.219	10.2
2,6-Dinitrotoluene	0.264	0.306	0.287	0.290	0.285	0.276	0.281		0.284	4.6
Acenaphthene	1.540	1.510	1.340	1.240	1.166	1.028	1.032		1.265	16.5
3-Nitroaniline	0.387	0.422	0.371	0.364	0.282				0.365	14.2
2,4-Dinitrophenol		0.069	0.099	0.141	0.155	0.162	0.177		0.134	0.998
Dibenzofuran	2.388	2.202	1.897	1.949	1.703	1.501	1.455		1.871	18.6

<- Outside QC limits: %RSD <20% or R^2 > 0.990

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA,LLC

ARI Job No: VR80 Project: CITY OF KENMORE

Instrument ID: NT6 Calibration Date: 10/19/12

LAB FILE ID: RRF1 =10191203 RRF5 =10191204 RRF10 =10191205
RRF25 =10191201 RRF40 =10191206 RRF60 =10191207
RRF80 =10191208 RRF0.2=10191202

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	RRF 0.2	___ RRF	%RSD /R^2
4-Nitrophenol	0.143	0.142	0.144	0.159	0.160	0.149	0.146		0.149	5.1
2,4-Dinitrotoluene	0.304	0.394	0.379	0.382	0.373	0.356	0.372		0.366	8.0
Fluorene	1.645	1.614	1.484	1.376	1.283	1.109	1.105		1.374	16.1
4-Chlorophenyl-phenylether	0.748	0.736	0.670	0.642	0.611	0.564	0.564		0.648	11.6
Diethylphthalate	1.488	1.453	1.320	1.253	1.182	1.054	1.062		1.259	13.8
4-Nitroaniline	0.331	0.371	0.342	0.351	0.326	0.319	0.330		0.338	5.2
4,6-Dinitro-2-methylphenol		0.107	0.120	0.133	0.139	0.140	0.143		0.130	10.8
N-Nitrosodiphenylamine (1)	0.703	0.716	0.618	0.590	0.575	0.535	0.506		0.606	13.1
4-Bromophenyl-phenylether	0.270	0.271	0.249	0.236	0.233	0.228	0.219		0.244	8.3
Hexachlorobenzene	0.291	0.284	0.254	0.244	0.239	0.229	0.221		0.252	10.5
Pentachlorophenol	0.105	0.136	0.145	0.151	0.157	0.156	0.158		0.144	13.2
Phenanthrene	1.469	1.446	1.273	1.151	1.090	0.947	0.891		1.181	19.2
Anthracene	1.500	1.479	1.336	1.202	1.122	0.949	0.897		1.212	19.8
Carbazole	1.177	1.177	1.052	0.950	0.891	0.794	0.776		0.974	17.1
Di-n-butylphthalate	1.428	1.476	1.351	1.213	1.130	0.947	0.909		1.208	18.6
Fluoranthene	1.481	1.455	1.346	1.267	1.170	0.988	0.959		1.238	16.9
Pyrene	1.640	1.689	1.460	1.346	1.220	1.063			1.403	17.3
Butylbenzylphthalate	0.579	0.640	0.580	0.566	0.536	0.491	0.482		0.553	10.0
Benzo(a)anthracene	1.400	1.410	1.268	1.187	1.103	1.004	0.946		1.188	15.4
3,3'-Dichlorobenzidine	0.400	0.389	0.346	0.343	0.275	0.252			0.334	17.8
Chrysene	1.420	1.388	1.215	1.166	1.075	0.948	0.889		1.157	17.6
bis(2-Ethylhexyl)phthalate	0.690	0.726	0.645	0.624	0.607	0.566	0.557		0.631	9.8
Di-n-octylphthalate	1.246	1.220	1.104	1.046	0.987	0.893	0.847		1.049	14.5
Benzo(b)fluoranthene	1.232	1.448	1.278	1.180	1.140	1.004	1.006		1.184	13.2
Benzo(k)fluoranthene	1.504	1.434	1.307	1.290	1.107	0.964	0.861		1.210	19.8
Benzo(a)pyrene	1.254	1.306	1.178	1.129	1.040	0.934	0.894		1.105	14.1
Indeno(1,2,3-cd)pyrene	1.708	1.773	1.583	1.529	1.418	1.350	1.305		1.524	11.7
Dibenzo(a,h)anthracene	1.421	1.472	1.314	1.243	1.140	1.042	1.001		1.233	14.7
Benzo(g,h,i)perylene	1.508	1.538	1.377	1.329	1.249	1.197	1.146		1.335	11.2
N-Nitrosodimethylamine	0.937	1.013	0.886	0.857	0.878	0.885	0.862		0.902	6.1
Aniline	2.808	2.795	2.342	2.429	2.225	2.113	1.984		2.385	13.4
Benzidine		0.510	0.422	0.377	0.285	0.246	0.226		0.344	0.994
Pyridine	1.523	1.767	1.536	1.483	1.502	1.496	1.482		1.541	6.6
1-methylnaphthalene	0.566	0.547	0.471	0.504	0.463	0.436	0.424		0.487	11.1
Azobenzene (1,2-DP-Hydrazine	1.505	1.523	1.384	1.282	1.220	1.079	1.085		1.297	14.1
Total Benzofluoranthenes	1.397	1.376	1.228	1.173	1.059	0.926	0.883		1.149	17.7
2-Fluorophenol	1.559	1.408	1.252	1.278	1.263	1.227			1.331	9.6

(1) Cannot be seperated from Diphenylamine

<- Outside QC limits: %RSD <20% or R^2 > 0.990

6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA,LLC

ARI Job No: VR80 Project: CITY OF KENMORE

Instrument ID: NT6 Calibration Date: 10/19/12

LAB FILE ID: RRF1 =10191203 RRF5 =10191204 RRF10 =10191205
RRF25 =10191201 RRF40 =10191206 RRF60 =10191207
RRF80 =10191208 RRF0.2=10191202

COMPOUND	RRF 1	RRF 5	RRF 10	RRF 25	RRF 40	RRF 60	RRF 80	RRF 0.2	___ RRF	%RSD /R^2
Phenol-d5	1.864	1.830	1.608	1.563	1.546	1.503			1.652	9.4
2-Chlorophenol-d4	1.543	1.489	1.329	1.306	1.288	1.246			1.367	8.8
1,2-Dichlorobenzene-d4	1.197	1.082	0.944	0.943	0.900	0.818			0.981	13.9
Nitrobenzene-d5	0.465	0.446	0.404	0.414	0.402	0.403			0.422	6.3
2-Fluorobiphenyl	1.615	1.429	1.299	1.270	1.209	1.143			1.328	12.8
2,4,6-Tribromophenol	0.163	0.171	0.165	0.173	0.176	0.175			0.170	3.1
Terphenyl-d14	0.875	0.808	0.703	0.705	0.672	0.653			0.736	11.8

<- Outside QC limits: %RSD <20% or R^2 > 0.990

FORM VI SV-3

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA,LLC

ARI Job No: VR80 Project: CITY OF KENMORE

Instrument ID: NT6 Cont. Calib. Date: 11/16/12

Init. Calib. Date: 10/19/12 Cont. Calib. Time: 0931

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift	
Phenol	1.731	1.783	0.800	AVRG	3.0	
Bis(2-Chloroethyl)ether	1.370	1.298	0.700	AVRG	-5.2	
2-Chlorophenol	1.434	1.468	0.800	AVRG	2.4	
1,3-Dichlorobenzene	1.606	1.560	0.010	AVRG	-2.9	
1,4-Dichlorobenzene	1.584	1.548	0.010	AVRG	-2.3	
1,2-Dichlorobenzene	1.510	1.451	0.010	AVRG	-3.9	
Benzyl alcohol	1.151	1.101	0.010	AVRG	-4.3	
2,2'-oxybis(1-Chloropropane)	1.922	1.942	0.010	AVRG	1.0	
2-Methylphenol	1.308	1.340	0.700	AVRG	2.4	
Hexachloroethane	0.632	0.597	0.300	AVRG	-5.5	
N-Nitroso-di-n-propylamine	0.970	0.967	0.500	AVRG	-0.3	
4-Methylphenol	1.348	1.444	0.600	AVRG	7.1	
Nitrobenzene	0.412	0.400	0.200	AVRG	-2.9	
Isophorone	0.638	0.600	0.400	AVRG	-6.0	
2-Nitrophenol	0.205	0.220	0.100	AVRG	7.3	
2,4-Dimethylphenol	0.372	0.379	0.200	AVRG	1.9	
Bis(2-Chloroethoxy)methane	0.456	0.421	0.300	AVRG	-7.7	
2,4-Dichlorophenol	0.309	0.334	0.200	AVRG	8.1	
1,2,4-Trichlorobenzene	0.353	0.345	0.010	AVRG	-2.3	
Naphthalene	1.179	1.109	0.700	AVRG	-5.9	
Benzoic acid	0.256	0.263	0.010	AVRG	2.7	
4-Chloroaniline	25.00	27.93	0.010	2ORDR	11.7	
Hexachlorobutadiene	0.214	0.214	0.010	AVRG	0.0	
4-Chloro-3-methylphenol	0.301	0.331	0.200	AVRG	10.0	
2-Methylnaphthalene	0.674	0.716	0.400	AVRG	6.2	
Hexachlorocyclopentadiene	0.375	0.271	0.050	AVRG	-27.7	<- NTC
2,4,6-Trichlorophenol	0.384	0.390	0.200	AVRG	1.6	
2,4,5-Trichlorophenol	0.403	0.424	0.200	AVRG	5.2	
2-Chloronaphthalene	1.116	1.052	0.800	AVRG	-5.7	
2-Nitroaniline	0.422	0.444	0.010	AVRG	5.2	
Acenaphthylene	1.956	1.905	0.900	AVRG	-2.6	
Dimethylphthalate	1.219	1.193	0.010	AVRG	-2.1	
2,6-Dinitrotoluene	0.284	0.292	0.200	AVRG	2.8	
Acenaphthene	1.265	1.200	0.900	AVRG	-5.1	
3-Nitroaniline	0.365	0.362	0.010	AVRG	-0.8	
2,4-Dinitrophenol	50.00	38.30	0.010	2ORDR	-23.4	<- NTC
Dibenzofuran	1.871	1.972	0.800	AVRG	5.4	

<- Exceeds QC limit of 20% D

* RF less than minimum RF

11/19/12

FORM VII SV-1

7C

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA,LLC

ARI Job No: VR80 Project: CITY OF KENMORE

Instrument ID: NT6 Cont. Calib. Date: 11/16/12

Init. Calib. Date: 10/19/12 Cont. Calib. Time: 0931

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
4-Nitrophenol	0.149	0.151	0.010	AVRG	1.3
2,4-Dinitrotoluene	0.366	0.382	0.200	AVRG	4.4
Fluorene	1.374	1.331	0.900	AVRG	-3.1
4-Chlorophenyl-phenylether	0.648	0.650	0.400	AVRG	0.3
Diethylphthalate	1.259	1.187	0.010	AVRG	-5.7
4-Nitroaniline	0.338	0.384	0.010	AVRG	13.6
4,6-Dinitro-2-methylphenol	0.130	0.120	0.010	AVRG	-7.7
N-Nitrosodiphenylamine(1)	0.606	0.546	0.010	AVRG	-9.9
4-Bromophenyl-phenylether	0.244	0.226	0.100	AVRG	-7.4
Hexachlorobenzene	0.252	0.232	0.100	AVRG	-7.9
Pentachlorophenol	0.144	0.119	0.050	AVRG	-17.4
Phenanthrene	1.181	1.125	0.700	AVRG	-4.7
Anthracene	1.212	1.152	0.700	AVRG	-5.0
Carbazole	0.974	0.923	0.010	AVRG	-5.2
Di-n-butylphthalate	1.208	1.170	0.010	AVRG	-3.1
Fluoranthene	1.238	1.261	0.600	AVRG	1.8
Pyrene	1.403	1.240	0.600	AVRG	-11.6
Butylbenzylphthalate	0.553	0.522	0.010	AVRG	-5.6
Benzo(a)anthracene	1.188	1.164	0.800	AVRG	-2.0
3,3'-Dichlorobenzidine	0.334	0.358	0.010	AVRG	7.2
Chrysene	1.157	1.113	0.700	AVRG	-3.8
bis(2-Ethylhexyl)phthalate	0.631	0.565	0.010	AVRG	-10.4
Di-n-octylphthalate	1.049	0.962	0.010	AVRG	-8.3
Benzo(b)fluoranthene	1.184	1.158	0.700	AVRG	-2.2
Benzo(k)fluoranthene	1.210	1.177	0.700	AVRG	-2.7
Benzo(a)pyrene	1.105	1.055	0.700	AVRG	-4.5
Indeno(1,2,3-cd)pyrene	1.524	1.290	0.500	AVRG	-15.4
Dibenzo(a,h)anthracene	1.233	1.065	0.400	AVRG	-13.6
Benzo(g,h,i)perylene	1.335	1.070	0.500	AVRG	-19.8
N-Nitrosodimethylamine	0.902	0.774	0.010	AVRG	-14.2
Aniline	2.385	2.377	0.010	AVRG	-0.3
Benzidine	25.00	0.000	0.010	2ORDR	
Pyridine	1.541	1.312	0.010	AVRG	-14.9
1-methylnaphthalene	0.487	0.500	0.010	AVRG	2.7
Azobenzene (1,2-DP-Hydrazine	1.297	1.368	0.010	AVRG	5.5
Total Benzofluoranthenes	1.149	1.100	0.010	AVRG	-4.3

(1) Cannot be separated from Diphenylamine

<- Exceeds QC limit of 20% D

* RF less than minimum RF

7C

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC | Client: ANCHOR QEA,LLC

ARI Job No: VR80 | Project: CITY OF KENMORE

Instrument ID: NT6 | Cont. Calib. Date: 11/16/12

Init. Calib. Date: 10/19/12 | Cont. Calib. Time: 0931

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
2-Fluorophenol	1.331	1.284	0.010	AVRG	-3.5
Phenol-d5	1.652	1.640	0.010	AVRG	-0.7
2-Chlorophenol-d4	1.367	1.370	0.010	AVRG	0.2
1,2-Dichlorobenzene-d4	0.981	0.984	0.010	AVRG	0.3
Nitrobenzene-d5	0.422	0.401	0.010	AVRG	-5.0
2-Fluorobiphenyl	1.328	1.277	0.010	AVRG	-3.8
2,4,6-Tribromophenol	0.170	0.189	0.010	AVRG	11.2
Terphenyl-d14	0.736	0.696	0.010	AVRG	-5.4

<- Exceeds QC limit of 20% D

* RF less than minimum RF

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA,LLC

ARI Job No: VR80 Project: CITY OF KENMORE

Ical Midpoint ID: 10191201 Ical Date: 10/19/12

Instrument ID: NT6 Cont. Cal Date: 11/16/12

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	ICAL MIDPT	735905	8.15	2597762	10.21	1503943	13.09
	UPPER LIMIT	1471810		5195524		3007886	
	LOWER LIMIT	367952		1298881		751972	
	CCAL	622823	7.63	2304185	9.68	1424421	12.55
	UPPER LIMIT		8.13		10.18		13.05
	LOWER LIMIT		7.13		9.18		12.05
01	VR80MBW1	496715	7.62	1813315	9.68	1059308	12.54
02	VR80LCSW1	511708	7.62	1874895	9.68	1124622	12.55
03	VR80LCSDW1	541418	7.62	1959285	9.68	1185684	12.55
04	HT-01-W-C-12	464086	7.62	1650639	9.68	995520	12.54
05	HT-04-W-C-12	544820	7.62	1924677	9.68	1156089	12.54
06	HT-04-W-C-DU	546697	7.62	1944802	9.68	1145634	12.54
07	WS-10-W-C-12	537645	7.62	1898784	9.68	1094618	12.54
08							
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24							
25							

IS1 = 1,4-Dichlorobenzene-d4
IS2 = Naphthalene-d8
IS3 = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-1

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA,LLC

ARI Job No: VR80 Project: CITY OF KENMORE

Ical Midpoint ID: 10191201 Ical Date: 10/19/12

Instrument ID: NT6 Cont. Cal Date: 11/16/12

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	ICAL MIDPT	2402003	15.48	2331938	19.80	2485610	21.97
	UPPER LIMIT	4804006		4663876		4971220	
	LOWER LIMIT	1201002		1165969		1242805	
	CCAL	2448750	14.92	2574544	19.23	2732500	21.38
	UPPER LIMIT		15.42		19.73		21.88
	LOWER LIMIT		14.42		18.73		20.88
01	VR80MBW1	1750868	14.91	1819846	19.22	1791563	21.37
02	VR80LCSW1	1932614	14.92	1948280	19.22	2042796	21.37
03	VR80LCSDW1	1999848	14.92	2041068	19.23	2227912	21.38
04	HT-01-W-C-12	1624314	14.91	1749260	19.21	1713738	21.37
05	HT-04-W-C-12	1887865	14.92	2044893	19.22	2003420	21.37
06	HT-04-W-C-DU	1884886	14.91	2000842	19.22	1971443	21.37
07	WS-10-W-C-12	1845455	14.92	1883234	19.22	1879682	21.37
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23							
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25							

IS4 = Phenanthrene-d10
IS5 = Chrysene-d12
IS6 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC | Client: ANCHOR QEA,LLC

ARI Job No: VR80 | Project: CITY OF KENMORE

Ical Midpoint ID: 10191201 | Ical Date: 10/19/12

Instrument ID: NT6 | Cont. Cal Date: 11/16/12

		IS7 AREA #	RT #	AREA #	RT #	AREA #	RT #
	ICAL MIDPT	2790605	20.94				
	UPPER LIMIT	5581210					
	LOWER LIMIT	1395302					
	CCAL	3174976	20.41				
	UPPER LIMIT		20.91				
	LOWER LIMIT		19.91				
01	VR80MBW1	2224125	20.41				
02	VR80LCSW1	2424873	20.41				
03	VR80LCSDW1	2587008	20.41				
04	HT-01-W-C-12	2218777	20.40				
05	HT-04-W-C-12	2579354	20.41				
06	HT-04-W-C-DU	2566892	20.41				
07	WS-10-W-C-12	2418062	20.41				
08							
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23							
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25							

IS7 = Di-n-octylphthalate-d4

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

SIM PAH Analysis
Report and Summary QC Forms

ARI Job ID: VR80

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Selected Ion Monitoring GC/MS **Sample ID: HT-01-W-C-121107**
Extraction Method: SW3520C **SAMPLE**

Lab Sample ID: VR80A
LIMS ID: 12-22456
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/13/12
Date Analyzed: 11/20/12 14:40
Instrument/Analyst: NT11/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
91-20-3	Naphthalene	0.020	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.020	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.016	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.024	0.10	< 0.10 U
83-32-9	Acenaphthene	0.015	0.10	< 0.10 U
86-73-7	Fluorene	0.019	0.10	< 0.10 U
85-01-8	Phenanthrene	0.026	0.10	< 0.10 U
120-12-7	Anthracene	0.025	0.10	< 0.10 U
206-44-0	Fluoranthene	0.021	0.10	< 0.10 U
129-00-0	Pyrene	0.028	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.023	0.10	< 0.10 U
218-01-9	Chrysene	0.026	0.10	< 0.10 U
205-99-2	Benzo(b)fluoranthene	0.027	0.10	< 0.10 U
207-08-9	Benzo(k)fluoranthene	0.027	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.059	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.029	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.042	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.030	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.016	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	0.20	< 0.20 U
205-82-3	Benzo(j)fluoranthene	0.027	0.10	< 0.10 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	55.0%
d14-Dibenzo(a,h)anthracen	64.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Selected Ion Monitoring GC/MS **Sample ID: HT-04-W-C-121107**
Extraction Method: SW3520C **SAMPLE**

Lab Sample ID: VR80B
LIMS ID: 12-22457
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/13/12
Date Analyzed: 11/20/12 15:10
Instrument/Analyst: NT11/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
91-20-3	Naphthalene	0.020	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.020	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.016	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.024	0.10	< 0.10 U
83-32-9	Acenaphthene	0.015	0.10	< 0.10 U
86-73-7	Fluorene	0.019	0.10	< 0.10 U
85-01-8	Phenanthrene	0.026	0.10	< 0.10 U
120-12-7	Anthracene	0.025	0.10	< 0.10 U
206-44-0	Fluoranthene	0.021	0.10	< 0.10 U
129-00-0	Pyrene	0.028	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.023	0.10	< 0.10 U
218-01-9	Chrysene	0.026	0.10	< 0.10 U
205-99-2	Benzo(b)fluoranthene	0.027	0.10	< 0.10 U
207-08-9	Benzo(k)fluoranthene	0.027	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.059	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.029	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.042	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.030	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.016	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	0.20	< 0.20 U
205-82-3	Benzo(j)fluoranthene	0.027	0.10	< 0.10 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	47.0%
d14-Dibenzo(a,h)anthracen	81.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Selected Ion Monitoring GC/MS **Sample ID: HT-04-W-C-dup-121107**
Extraction Method: SW3520C **SAMPLE**

Lab Sample ID: VR80C
LIMS ID: 12-22458
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/13/12
Date Analyzed: 11/20/12 15:40
Instrument/Analyst: NT11/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
91-20-3	Naphthalene	0.020	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.020	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.016	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.024	0.10	< 0.10 U
83-32-9	Acenaphthene	0.015	0.10	< 0.10 U
86-73-7	Fluorene	0.019	0.10	< 0.10 U
85-01-8	Phenanthrene	0.026	0.10	< 0.10 U
120-12-7	Anthracene	0.025	0.10	< 0.10 U
206-44-0	Fluoranthene	0.021	0.10	< 0.10 U
129-00-0	Pyrene	0.028	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.023	0.10	< 0.10 U
218-01-9	Chrysene	0.026	0.10	< 0.10 U
205-99-2	Benzo(b)fluoranthene	0.027	0.10	< 0.10 U
207-08-9	Benzo(k)fluoranthene	0.027	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.059	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.029	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.042	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.030	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.016	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	0.20	< 0.20 U
205-82-3	Benzo(j)fluoranthene	0.027	0.10	< 0.10 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	50.3%
d14-Dibenzo(a,h)anthracen	91.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Selected Ion Monitoring GC/MS **Sample ID: WS-10-W-C-121107**
Extraction Method: SW3520C **SAMPLE**

Lab Sample ID: VR80D
LIMS ID: 12-22459
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/13/12
Date Analyzed: 11/20/12 16:10
Instrument/Analyst: NT11/JZ

Sample Amount: 500 mL
Final Extract Volume: 0.50 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
91-20-3	Naphthalene	0.020	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.020	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.016	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.024	0.10	< 0.10 U
83-32-9	Acenaphthene	0.015	0.10	< 0.10 U
86-73-7	Fluorene	0.019	0.10	< 0.10 U
85-01-8	Phenanthrene	0.026	0.10	< 0.10 U
120-12-7	Anthracene	0.025	0.10	< 0.10 U
206-44-0	Fluoranthene	0.021	0.10	< 0.10 U
129-00-0	Pyrene	0.028	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.023	0.10	< 0.10 U
218-01-9	Chrysene	0.026	0.10	< 0.10 U
205-99-2	Benzo(b)fluoranthene	0.027	0.10	< 0.10 U
207-08-9	Benzo(k)fluoranthene	0.027	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.059	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.029	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.042	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.030	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.016	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	0.20	< 0.20 U
205-82-3	Benzo(j)fluoranthene	0.027	0.10	< 0.10 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	50.7%
d14-Dibenzo(a,h)anthracen	93.3%

ANALYTICAL RESOURCES INCORPORATED

SIM SW8270 SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Client ID	MNP	DBA	TOT OUT
MB-111312	52.7%	103%	0
LCS-111312	57.0%	79.7%	0
LCSD-111312	58.0%	77.0%	0
HT-01-W-C-121107	55.0%	64.0%	0
HT-04-W-C-121107	47.0%	81.0%	0
HT-04-W-C-dup-121107	50.3%	91.0%	0
WS-10-W-C-121107	50.7%	93.3%	0

	LCS/MB LIMITS	QC LIMITS
(MNP) = d10-2-Methylnaphthalene	(40-110)	(33-107)
(DBA) = d14-Dibenzo(a,h)anthracene	(33-140)	(10-142)

Prep Method: SW3520C
Log Number Range: 12-22456 to 12-22459

VD80 : 00055

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by SW8270D-SIM GC/MS

Sample ID: LCS-111312
LAB CONTROL SAMPLE

Lab Sample ID: LCS-111312
LIMS ID: 12-22456
Matrix: Water
Data Release Authorized:
Reported: 11/26/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
Event: NA
Date Sampled: NA
Date Received: NA

Date Extracted LCS/LCSD: 11/13/12

Date Analyzed LCS: 11/20/12 13:40
LCSD: 11/20/12 14:10
Instrument/Analyst LCS: NT11/JZ
LCSD: NT11/JZ

Sample Amount LCS: 500 mL
LCSD: 500 mL
Final Extract Volume LCS: 0.50 mL
LCSD: 0.50 mL
Dilution Factor LCS: 1.00
LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Naphthalene	1.81	3.00	60.3%	1.84	3.00	61.3%	1.6%
2-Methylnaphthalene	1.78	3.00	59.3%	1.81	3.00	60.3%	1.7%
1-Methylnaphthalene	1.94	3.00	64.7%	1.99	3.00	66.3%	2.5%
Acenaphthylene	1.72	3.00	57.3%	1.81	3.00	60.3%	5.1%
Acenaphthene	1.94	3.00	64.7%	2.00	3.00	66.7%	3.0%
Fluorene	2.12	3.00	70.7%	2.18	3.00	72.7%	2.8%
Phenanthrene	2.25	3.00	75.0%	2.31	3.00	77.0%	2.6%
Anthracene	1.90	3.00	63.3%	2.05	3.00	68.3%	7.6%
Fluoranthene	2.42	3.00	80.7%	2.58	3.00	86.0%	6.4%
Pyrene	2.43	3.00	81.0%	2.58	3.00	86.0%	6.0%
Benzo(a)anthracene	2.30	3.00	76.7%	2.44	3.00	81.3%	5.9%
Chrysene	2.45	3.00	81.7%	2.61	3.00	87.0%	6.3%
Benzo(b)fluoranthene	2.93	3.00	97.7%	3.10	3.00	103%	5.6%
Benzo(k)fluoranthene	2.71	3.00	90.3%	2.88	3.00	96.0%	6.1%
Benzo(a)pyrene	1.98	3.00	66.0%	2.05	3.00	68.3%	3.5%
Indeno(1,2,3-cd)pyrene	2.54	3.00	84.7%	2.63	3.00	87.7%	3.5%
Dibenz(a,h)anthracene	2.28	3.00	76.0%	2.27	3.00	75.7%	0.4%
Benzo(g,h,i)perylene	2.60	3.00	86.7%	2.70	3.00	90.0%	3.8%
Dibenzofuran	1.83	3.00	61.0%	1.87	3.00	62.3%	2.2%
Total Benzofluoranthenes	7.81	9.00	86.8%	8.31	9.00	92.3%	6.2%
Benzo(j)fluoranthene	2.17	3.00	72.3%	2.33	3.00	77.7%	7.1%

Reported in µg/L (ppb)

RPD calculated using sample concentrations per SW846.

SIM Semivolatile Surrogate Recovery

	LCS	LCSD
d10-2-Methylnaphthalene	57.0%	58.0%
d14-Dibenzo(a,h)anthracene	79.7%	77.0%

4B

SEMIVOLATILE METHOD BLANK SUMMARY

BLANK NO.

VR80MBW1

Lab Name: ANALYTICAL RESOURCES INC

Client: ANCHOR QEA, LLC

ARI Job No: VR80

Project: CITY OF KENMORE

Lab File ID: 11201203

Date Extracted: 11/13/12

Instrument ID: NT11

Date Analyzed: 11/20/12

Matrix: LIQUID

Time Analyzed: 1310

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	VR80LCSW1	VR80LCSW1	11201204	11/20/12
02	VR80LCSDW1	VR80LCSDW1	11201205	11/20/12
03	HT-01-W-C-121107	VR80A	11201206	11/20/12
04	HT-04-W-C-121107	VR80B	11201207	11/20/12
05	HT-04-W-C-DUP-12	VR80C	11201208	11/20/12
06	WS-10-W-C-121107	VR80D	11201209	11/20/12
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ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PNAs by Selected Ion Monitoring GC/MS **Sample ID: MB-111312**
Extraction Method: SW3520C **METHOD BLANK**

Lab Sample ID: MB-111312 QC Report No: VR80-Anchor QEA, LLC
LIMS ID: 12-22456 Project: City of Kenmore
Matrix: Water
Data Release Authorized:
Reported: 12/11/12 Date Sampled: NA
Date Received: NA

Date Extracted: 11/13/12 Sample Amount: 500 mL
Date Analyzed: 11/20/12 13:10 Final Extract Volume: 0.50 mL
Instrument/Analyst: NT11/JZ Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
91-20-3	Naphthalene	0.020	0.10	< 0.10 U
91-57-6	2-Methylnaphthalene	0.020	0.10	< 0.10 U
90-12-0	1-Methylnaphthalene	0.016	0.10	< 0.10 U
208-96-8	Acenaphthylene	0.024	0.10	< 0.10 U
83-32-9	Acenaphthene	0.015	0.10	< 0.10 U
86-73-7	Fluorene	0.019	0.10	< 0.10 U
85-01-8	Phenanthrene	0.026	0.10	< 0.10 U
120-12-7	Anthracene	0.025	0.10	< 0.10 U
206-44-0	Fluoranthene	0.021	0.10	< 0.10 U
129-00-0	Pyrene	0.028	0.10	< 0.10 U
56-55-3	Benzo(a)anthracene	0.023	0.10	< 0.10 U
218-01-9	Chrysene	0.026	0.10	< 0.10 U
205-99-2	Benzo(b)fluoranthene	0.027	0.10	< 0.10 U
207-08-9	Benzo(k)fluoranthene	0.027	0.10	< 0.10 U
50-32-8	Benzo(a)pyrene	0.059	0.10	< 0.10 U
193-39-5	Indeno(1,2,3-cd)pyrene	0.029	0.10	< 0.10 U
53-70-3	Dibenz(a,h)anthracene	0.042	0.10	< 0.10 U
191-24-2	Benzo(g,h,i)perylene	0.030	0.10	< 0.10 U
132-64-9	Dibenzofuran	0.016	0.10	< 0.10 U
TOTBFA	Total Benzofluoranthenes	0.20	0.20	< 0.20 U
205-82-3	Benzo(j)fluoranthene	0.027	0.20	< 0.10 U

Reported in µg/L (ppb)

SIM Semivolatile Surrogate Recovery

d10-2-Methylnaphthalene	52.7%
d14-Dibenzo(a,h)anthracen	103%

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA, LLC.

Instrument ID: NT11 Project: CITY OF KENMORE

DFTPP Injection Date: 11/15/12 DFTPP Injection Time: 1733

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	45.3
68	Less than 2.0% of mass 69	0.5 (1.0)1
69	Mass 69 relative abundance	51.4
70	Less than 2.0% of mass 69	0.4 (0.7)1
127	10.0 - 80.0% of mass 198	68.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.7
275	10.0 - 60.0% of mass 198	24.2
365	Greater than 1.0% of mass 198	4.30
441	0.0 - 24.0% of mass 442	23.8 (15.5)2
442	50.0 - 200.0% of mass 198	153.9
443	15.0 - 24.0% of mass 442	30.9 (20.1)2

1-Value is % mass 69 2-Value is % mass 442

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	IC251115	IC251115	11151202	11/15/12	1853
02	IC011115	IC011115	11151203	11/15/12	1924
03	IC051115	IC051115	11151204	11/15/12	1954
04	IC11115	IC11115	11151205	11/15/12	2024
05	IC51115	IC51115	11151206	11/15/12	2054
06	IC101115	IC101115	11151207	11/15/12	2124
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5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA, LLC.

Instrument ID: NT11 Project: CITY OF KENMORE

DFTPP Injection Date: 11/20/12 DFTPP Injection Time: 1207

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.0% of mass 198	38.3
68	Less than 2.0% of mass 69	0.4 (0.8)1
69	Mass 69 relative abundance	46.8
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	10.0 - 80.0% of mass 198	64.2
197	Less than 2.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.3
275	10.0 - 60.0% of mass 198	24.2
365	Greater than 1.0% of mass 198	3.93
441	0.0 - 24.0% of mass 442	27.6 (14.4)2
442	50.0 - 200.0% of mass 198	192.5
443	15.0 - 24.0% of mass 442	37.0 (19.2)2

1-Value is % mass 69 2-Value is % mass 442

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CC1120	CC1120	11201202	11/20/12	1231
02	VR80MBW1	VR80MBW1	11201203	11/20/12	1310
03	VR80LCSW1	VR80LCSW1	11201204	11/20/12	1340
04	VR80LCSDW1	VR80LCSDW1	11201205	11/20/12	1410
05	HT-01-W-C-121107	VR80A	11201206	11/20/12	1440
06	HT-04-W-C-121107	VR80B	11201207	11/20/12	1510
07	HT-04-W-C-DUP-12	VR80C	11201208	11/20/12	1540
08	WS-10-W-C-121107	VR80D	11201209	11/20/12	1610
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6B

SEMIVOLATILE 8270-D INITIAL CALIBRATION DATA

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA, LLC.

ARI Job No: VR80 Project: CITY OF KENMORE

Instrument ID: NT11 Calibration Date: 11/15/12

LAB FILE ID: RRF0.1=11151203 RRF0.5=11151204 RRF1 =11151205
RRF2.5=11151202 RRF5 =11151206 RRF10 =11151207

COMPOUND	RRF 0.1	RRF 0.5	RRF 1	RRF 2.5	RRF 5	RRF 10	___ RRF	%RSD /R^2
Naphthalene	1.245	1.165	1.063	1.031	0.963	0.946	1.069	10.9
2-Methylnaphthalene	0.652	0.656	0.611	0.596	0.559	0.539	0.602	7.9
Acenaphthylene	1.780	1.828	1.734	1.783	1.669	1.634	1.738	4.3
Acenaphthene	1.315	1.214	1.089	1.067	0.991	0.956	1.105	12.3
Dibenzofuran	1.884	1.804	1.594	1.582	1.455	1.397	1.619	11.8
Fluorene	1.321	1.376	1.242	1.254	1.159	1.114	1.244	7.8
Phenanthrene	1.424	1.320	1.230	1.160	1.086	1.028	1.208	12.2
Anthracene	1.231	1.250	1.167	1.166	1.094	1.049	1.160	6.7
Fluoranthene	1.312	1.325	1.228	1.203	1.123	1.072	1.210	8.3
Pyrene	1.201	1.172	1.102	1.101	1.027	1.010	1.102	6.9
Benzo(a)anthracene	1.137	1.059	1.006	0.974	0.924	0.929	1.005	8.2
Chrysene	1.153	1.046	0.950	0.936	0.899	0.868	0.975	10.9
Benzo(b)fluoranthene	0.974	0.952	0.931	0.915	0.865	0.917	0.926	4.0
Benzo(k)fluoranthene	1.077	1.031	0.996	1.025	0.954	0.948	1.005	4.9
Benzo(j)fluoranthene	1.141	1.106	1.090	1.046	0.986	0.995	1.061	5.9
Benzo(a)pyrene	0.902	1.004	0.943	0.960	0.913	0.919	0.940	4.0
Indeno(1,2,3-cd)pyrene	0.995	1.146	1.148	1.224	1.150	1.176	1.140	6.8
Dibenzo(a,h)anthracene	0.816	0.930	0.944	0.993	0.944	0.941	0.928	6.4
Benzo(g,h,i)perylene	0.902	0.961	0.977	0.970	0.957	1.050	0.970	4.9
1-methylnaphthalene	0.667	0.620	0.568	0.566	0.529	0.511	0.577	10.1
Perylene	1.111	1.037	0.960	0.952	0.903	0.886	0.975	8.7
2-Methylnaphthalene-d10	0.782	0.748	0.682	0.674	0.618	0.597	0.684	10.5
Dibenzo(a,h)anthracene-d14	0.518	0.628	0.642	0.717	0.721	0.752	0.663	12.9

<- Outside QC limits: %RSD <20% or R^2 > 0.990

7B

SEMIVOLATILE 8270-D CONTINUING CALIBRATION CHECK

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA, LLC.

ARI Job No: VR80 Project: CITY OF KENMORE

Instrument ID: NT11 Cont. Calib. Date: 11/20/12

Init. Calib. Date: 11/15/12 Cont. Calib. Time: 1231

COMPOUND	CalAmt or ARF	CC Amt or RF	MIN RRF	CURVE TYPE	%D or Drift
Naphthalene	1.069	1.021	0.700	AVRG	-4.5
2-Methylnaphthalene	0.602	0.599	0.400	AVRG	-0.5
Acenaphthylene	1.738	1.778	0.900	AVRG	2.3
Acenaphthene	1.105	1.056	0.900	AVRG	-4.4
Dibenzofuran	1.619	1.537	0.800	AVRG	-5.1
Fluorene	1.244	1.259	0.900	AVRG	1.2
Phenanthrene	1.208	1.162	0.700	AVRG	-3.8
Anthracene	1.160	1.162	0.700	AVRG	0.2
Fluoranthene	1.210	1.221	0.600	AVRG	0.9
Pyrene	1.102	1.086	0.600	AVRG	-1.4
Benzo(a)anthracene	1.005	0.974	0.800	AVRG	-3.1
Chrysene	0.975	0.943	0.700	AVRG	-3.3
Benzo(b)fluoranthene	0.926	0.973	0.700	AVRG	5.1
Benzo(k)fluoranthene	1.005	1.037	0.700	AVRG	3.2
Benzo(j)fluoranthene	1.061	1.062	0.010	AVRG	0.1
Benzo(a)pyrene	0.940	0.948	0.700	AVRG	0.8
Indeno(1,2,3-cd)pyrene	1.140	1.247	0.500	AVRG	9.4
Dibenzo(a,h)anthracene	0.928	1.021	0.400	AVRG	10.0
Benzo(g,h,i)perylene	0.970	1.078	0.500	AVRG	11.1
1-methylnaphthalene	0.577	0.563	0.010	AVRG	-2.4
Perylene	0.975	0.947	0.010	AVRG	-2.9
2-Methylnaphthalene-d10	0.684	0.677	0.010	AVRG	-1.0
Dibenzo(a,h)anthracene-d14	0.663	0.769	0.010	AVRG	16.0

<- Exceeds QC limit of 20% D

* RF less than minimum RF

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC | Client: ANCHOR QEA, LLC.

ARI Job No: VR80 | Project: CITY OF KENMORE

Ical Midpoint ID: 11151202 | Ical Date: 11/15/12

Instrument ID: NT11 | Cont. Cal Date: 11/20/12

		IS1(NPT) AREA	#	RT	#	IS2(ANT) AREA	#	RT	#	IS3(PHN) AREA	#	RT	#
	ICAL MIDPT	516111		5.47		284255		7.74		410660		9.76	
	UPPER LIMIT	1032222				568510				821320			
	LOWER LIMIT	258056				142128				205330			
	CCAL	632714		5.44		355653		7.72		513102		9.74	
	UPPER LIMIT			5.94				8.22				10.24	
	LOWER LIMIT			4.94				7.22				9.24	
01	VR80MBW1	654445		5.43		365629		7.71		528991		9.73	
02	VR80LCSW1	661011		5.43		374905		7.71		539040		9.73	
03	VR80LCSDW1	677815		5.43		382722		7.71		548086		9.73	
04	HT-01-W-C-12	649843		5.43		368699		7.71		526649		9.73	
05	HT-04-W-C-12	686302		5.43		389999		7.71		549943		9.73	
06	HT-04-W-C-DU	666389		5.43		379382		7.71		537689		9.73	
07	WS-10-W-C-12	679087		5.43		382162		7.71		550129		9.73	
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IS1 = Naphthalene-d8
IS2 = Acenaphthene-d10
IS3 = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA, LLC.

ARI Job No: VR80 Project: CITY OF KENMORE

Ical Midpoint ID: 11151202 Ical Date: 11/15/12

Instrument ID: NT11 Cont. Cal Date: 11/20/12

		IS4(CRY) AREA #	RT #	IS5(PRY) AREA #	RT #	AREA #	RT #
	ICAL MIDPT	467886	14.38	472330	18.14		
	UPPER LIMIT	935772		944660			
	LOWER LIMIT	233943		236165			
	CCAL	617135	14.34	629632	18.10		
	UPPER LIMIT		14.84		18.60		
	LOWER LIMIT		13.84		17.60		
01	VR80MBW1	576730	14.34	525729	18.10		
02	VR80LCSW1	590855	14.34	549719	18.10		
03	VR80LCSDW1	604613	14.34	560931	18.10		
04	HT-01-W-C-12	582917	14.34	546608	18.10		
05	HT-04-W-C-12	622005	14.34	576302	18.10		
06	HT-04-W-C-DU	593787	14.34	564841	18.10		
07	WS-10-W-C-12	614288	14.34	565809	18.10		
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IS4 = Chrysene-d12
IS5 = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area from Ical midpoint
AREA LOWER LIMIT = - 50% of internal standard area from Ical midpoint
RT UPPER LIMIT = + 0.50 minutes of internal standard RT from Cont. Cal
RT LOWER LIMIT = - 0.50 minutes of internal standard RT from Cont. Cal

* Values outside of QC limits.

FORM VIII SV-2

Pesticide Analysis
Report and Summary QC Forms

ARI Job ID: VR80

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method SW8081B **Sample ID: HT-01-W-C-121107**
Extraction Method: SW3510C **SAMPLE**

Lab Sample ID: VR80A
LIMS ID: 12-22456
Matrix: Water
Data Release Authorized:
Reported: 11/21/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/13/12
Date Analyzed: 11/20/12 19:06
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No

CAS Number	Analyte	MDL	RL	Result
87-68-3	Hexachlorobutadiene	0.012	0.050	< 0.050 U

Reported in µg/L (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	86.8%
Tetrachlorometaxylene	59.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method SW8081B **Sample ID: HT-04-W-C-121107**
Extraction Method: SW3510C **SAMPLE**
Page 1 of 1

Lab Sample ID: VR80B
LIMS ID: 12-22457
Matrix: Water
Data Release Authorized:
Reported: 11/21/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/13/12
Date Analyzed: 11/20/12 19:23
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No

CAS Number	Analyte	MDL	RL	Result
87-68-3	Hexachlorobutadiene	0.012	0.050	< 0.050 U

Reported in µg/L (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	90.8%
Tetrachlorometaxylene	60.8%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method SW8081B **Sample ID: HT-04-W-C-dup-121107**
Extraction Method: SW3510C **SAMPLE**
Page 1 of 1

Lab Sample ID: VR80C
LIMS ID: 12-22458
Matrix: Water
Data Release Authorized:
Reported: 11/21/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/13/12
Date Analyzed: 11/20/12 19:41
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No

CAS Number	Analyte	MDL	RL	Result
87-68-3	Hexachlorobutadiene	0.012	0.050	< 0.050 U

Reported in µg/L (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	89.5%
Tetrachlorometaxylene	61.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method SW8081B **Sample ID: WS-10-W-C-121107**
Extraction Method: SW3510C **SAMPLE**

Lab Sample ID: VR80D
LIMS ID: 12-22459
Matrix: Water
Data Release Authorized:
Reported: 11/21/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore
Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/13/12
Date Analyzed: 11/20/12 19:59
Instrument/Analyst: ECD6/YZ
GPC Cleanup: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00
Silica Gel: No

CAS Number	Analyte	MDL	RL	Result
87-68-3	Hexachlorobutadiene	0.012	0.050	< 0.050 U

Reported in µg/L (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	83.5%
Tetrachlorometaxylene	60.8%

ANALYTICAL RESOURCES INCORPORATED

SW8081/PESTICIDE WATER SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Client ID	DCBP	TCMX	TOT OUT
MB-111312	84.8%	68.0%	0
LCS-111312	82.2%	67.2%	0
LCSD-111312	77.8%	60.2%	0
HT-01-W-C-121107	86.8%	59.0%	0
HT-04-W-C-121107	90.8%	60.8%	0
HT-04-W-C-dup-121107	89.5%	61.0%	0
WS-10-W-C-121107	83.5%	60.8%	0

	LCS/MB LIMITS	QC LIMITS
(DCBP) = Decachlorobiphenyl	(37-125)	(11-144)
(TCMX) = Tetrachlorometaxylene	(38-103)	(30-105)

Prep Method: SW3510C
Log Number Range: 12-22456 to 12-22459

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method SW8081B **Sample ID: LCS-111312**
Page 1 of 1 **LCS/LCSD**

Lab Sample ID: LCS-111312 QC Report No: VR80-Anchor QEA, LLC
LIMS ID: 12-22456 Project: City of Kenmore
Matrix: Water
Data Release Authorized: Date Sampled: 11/07/12
Reported: 11/21/12 Date Received: 11/08/12

Date Extracted LCS/LCSD: 11/13/12 Sample Amount LCS: 500 mL
LCSD: 500 mL
Date Analyzed LCS: 11/20/12 18:30 Final Extract Volume LCS: 5.0 mL
LCSD: 11/20/12 18:48 LCSD: 5.0 mL
Instrument/Analyst LCS: ECD6/YZ Dilution Factor LCS: 1.00
LCSD: ECD6/YZ LCSD: 1.00
GPC Cleanup: No Sulfur Cleanup: Yes
Florisil Cleanup: No Silica Gel: No

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Hexachlorobutadiene	0.109	0.200	54.5%	0.103	0.200	51.5%	5.7%

Pest/PCB Surrogate Recovery

	LCS	LCSD
Decachlorobiphenyl	82.2%	77.8%
Tetrachlorometaxylene	67.2%	60.2%

Results reported in µg/L (ppb)
RPD calculated using sample concentrations per SW846.

FORM 4
PESTICIDE METHOD BLANK SUMMARY

BLANK NO.

VR80MBW1

Lab Name: ANALYTICAL RESOURCES INC — Client: ANCHOR QEA, LLC

ARI Job No.: VR80 — Project: CITY OF KENMORE

Lab Sample ID: VR80MBW1 — Lab File ID: 1120A023

Date Extracted: 11/13/12 — Matrix: LIQUID

Date Analyzed: 11/20/12 — Instrument ID: ECD6

Time Analyzed: 1812 — GC Columns: STX-CLP1/STX-CLP2

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED
01	VR80LCSW1	VR80LCSW1	11/20/12
02	VR80LCSDW1	VR80LCSDW1	11/20/12
03	HT-01-W-C-121107	VR80A	11/20/12
04	HT-04-W-C-121107	VR80B	11/20/12
05	HT-04-W-C-DUP-12110	VR80C	11/20/12
06	WS-10-W-C-121107	VR80D	11/20/12

ALL RUNS ARE DUAL COLUMN

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
Pesticides/PCB by GC/ECD Method SW8081B **Sample ID: MB-111312**
Extraction Method: SW3510C **METHOD BLANK**

Page 1 of 1
Lab Sample ID: MB-111312 QC Report No: VR80-Anchor QEA, LLC
LIMS ID: 12-22456 Project: City of Kenmore
Matrix: Water
Data Release Authorized: [illegible] Date Sampled: NA
Reported: 11/21/12 Date Received: NA

Date Extracted: 11/13/12 Sample Amount: 500 mL
Date Analyzed: 11/20/12 18:12 Final Extract Volume: 5.0 mL
Instrument/Analyst: ECD6/YZ Dilution Factor: 1.00
GPC Cleanup: No Silica Gel: No
Sulfur Cleanup: Yes
Florisil Cleanup: No

CAS Number	Analyte	MDL	RL	Result
87-68-3	Hexachlorobutadiene	0.012	0.050	< 0.050 U

Reported in µg/L (ppb)

Pest/PCB Surrogate Recovery

Decachlorobiphenyl	84.8%
Tetrachlorometaxylene	68.0%

FORM I

6D

8081 INITIAL CALIBRATION RETENTION TIMES

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX-CLP1 ID: 0.53 (mm) Instrument ID: ECD6

Calibration Date: 10/03/12

	RT OF STANDARDS							MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	RT	FROM	TO
alpha-BHC	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.15	4.10	4.20
beta-BHC	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.50	4.45	4.55
delta-BHC	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.66	4.61	4.71
gamma-BHC (Lindane)	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.42	4.37	4.47
Heptachlor	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.86	4.81	4.91
Aldrin	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.15	5.10	5.20
Heptachlor epoxide b	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.72	5.67	5.77
Endosulfan I	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.10	6.05	6.15
Dieldrin	6.32	6.32	6.32	6.32	6.32	6.32	6.32	6.32	6.27	6.37
4,4'-DDE	6.03	6.03	6.03	6.03	6.03	6.03	6.03	6.03	5.98	6.08
Endrin	6.54	6.54	6.54	6.54	6.54	6.54	6.54	6.54	6.49	6.59
Endosulfan II	6.75	6.75	6.75	6.75	6.75	6.74	6.75	6.75	6.70	6.80
4,4'-DDD	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.58	6.53	6.63
Endosulfan sulfate	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.51	7.46	7.56
4,4'-DDT	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.84	6.79	6.89
Methoxychlor	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.27	7.22	7.32
Endrin ketone	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.77	7.72	7.82
Endrin aldehyde	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.12	7.07	7.17
gamma-Chlordane	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.84	5.79	5.89
alpha-Chlordane	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.97	5.92	6.02
Hexachlorobutadiene	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.21	2.16	2.26
Hexachlorobenzene	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	3.95	4.05
Tetrachloro-m-xylene	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.67	3.62	3.72
Decachlorobiphenyl	8.61	8.61	8.61	8.61	8.61	8.61	8.61	8.61	8.56	8.66

6D

8081 INITIAL CALIBRATION RETENTION TIMES

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX-CLP2 ID: 0.53 (mm) Instrument ID: ECD6

Calibration Date: 10/03/12

	RT OF STANDARDS							MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	RT	FROM	TO
alpha-BHC	4.58	4.58	4.58	4.58	4.58	4.58	4.59	4.58	4.54	4.64
beta-BHC	5.01	5.01	5.01	5.01	5.01	5.01	5.01	5.01	4.96	5.06
delta-BHC	5.31	5.31	5.31	5.31	5.31	5.31	5.31	5.31	5.26	5.36
gamma-BHC (Lindane)	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.94	4.89	4.99
Heptachlor	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.40	5.35	5.45
Aldrin	5.73	5.73	5.73	5.73	5.74	5.74	5.74	5.73	5.69	5.79
Heptachlor epoxide b	6.29	6.29	6.29	6.29	6.29	6.29	6.29	6.29	6.24	6.34
Endosulfan I	6.68	6.68	6.68	6.68	6.68	6.68	6.68	6.68	6.63	6.73
Dieldrin	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.94	6.89	6.99
4,4'-DDE	6.74	6.74	6.74	6.74	6.74	6.74	6.75	6.74	6.70	6.80
Endrin	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.23	7.18	7.28
Endosulfan II	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.42	7.37	7.47
4,4'-DDD	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.28	7.23	7.33
Endosulfan sulfate	7.96	7.96	7.96	7.96	7.96	7.96	7.96	7.96	7.91	8.01
4,4'-DDT	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.57	7.52	7.62
Methoxychlor	8.16	8.16	8.16	8.16	8.16	8.16	8.16	8.16	8.11	8.21
Endrin ketone	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.45	8.40	8.50
Endrin aldehyde	7.71	7.71	7.71	7.71	7.71	7.71	7.71	7.71	7.66	7.76
gamma-Chlordane	6.47	6.47	6.47	6.47	6.47	6.47	6.48	6.47	6.43	6.53
alpha-Chlordane	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.61	6.56	6.66
Hexachlorobutadiene	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.38	2.33	2.43
Hexachlorobenzene	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.46	4.41	4.51
Tetrachloro-m-xylene	4.01	4.01	4.01	4.01	4.01	4.01	4.01	4.01	3.96	4.06
Decachlorobiphenyl	9.57	9.57	9.57	9.57	9.57	9.57	9.57	9.57	9.52	9.62

6E

8081 PESTICIDE INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX-CLP1 ID: 0.53 (mm) Instrument ID: ECD6

Calibration Date: 10/03/12

	CALIBRATION FACTORS								R^2
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	MEAN	%RSD
alpha-BHC	1.4836	1.4616	1.4938	1.4882	1.4985	1.4906	1.5199	1.4909	1.2
beta-BHC	0.7515	0.6928	0.6569	0.6074	0.5837	0.5625	0.5568	0.6302	11.6
delta-BHC	1.2027	1.1705	1.1786	1.1878	1.2088	1.2162	1.2478	1.2018	2.2
gamma-BHC (Lindane)	1.4203	1.3736	1.3766	1.3565	1.3552	1.3431	1.3628	1.3697	1.8
Heptachlor	1.3710	1.2938	1.2653	1.2234	1.2040	1.1717	1.1640	1.2419	5.9
Aldrin	1.3883	1.3094	1.2895	1.2509	1.2369	1.2047	1.1979	1.2682	5.3
Heptachlor epoxide b	1.4111	1.3113	1.2616	1.1995	1.1708	1.1149	1.0884	1.2225	9.3
Endosulfan I	1.3006	1.2127	1.1670	1.1114	1.0773	1.0349	1.0155	1.1313	9.0
Dieldrin	1.2696	1.2204	1.2149	1.1719	1.1402	1.0940	1.0752	1.1694	6.1
4,4'-DDE	1.1509	1.1089	1.1091	1.0833	1.0630	1.0274	1.0156	1.0797	4.5
Endrin	1.1855	1.1373	1.1231	1.0879	1.0757	1.0200	1.0221	1.0931	5.6
Endosulfan II	1.1881	1.1269	1.0957	1.0423	1.0170	0.9634	0.9552	1.0555	8.2
4,4'-DDD	1.0319	0.9916	0.9750	0.9474	0.9355	0.8986	0.9012	0.9544	5.1
Endosulfan sulfate	0.9858	0.9374	0.9084	0.8788	0.8558	0.8264	0.8267	0.8885	6.7
4,4'-DDT	1.0119	0.9801	0.9720	0.9504	0.9467	0.9240	0.9327	0.9597	3.2
Methoxychlor	0.5578	0.5238	0.4924	0.4554	0.4308	0.4096	0.4145	0.4692	12.2
Endrin ketone	1.2244	1.1156	1.0606	1.0086	0.9677	0.9416	0.9544	1.0390	9.9
Endrin aldehyde	0.9849	0.9225	0.8807	0.8346	0.8072	0.7659	0.7630	0.8512	9.7
gamma-Chlordane	1.3792	1.2811	1.2367	1.1861	1.1606	1.1322	1.1335	1.2156	7.4
alpha-Chlordane	1.3429	1.2457	1.2000	1.1461	1.1150	1.0849	1.0777	1.1732	8.2
Hexachlorobutadiene	2.0812	1.9402	1.8804	1.7634	1.7036	1.6425	1.6366	1.8068	9.2
Hexachlorobenzene	1.5903	1.4533	1.3696	1.2635	1.1969	1.1324	1.1201	1.3037	13.5
Tetrachloro-m-xylene	1.3460	1.2798	1.2458	1.1734	1.1286	1.0704	1.0536	1.1854	9.3
Decachlorobiphenyl	1.3890	1.2243	1.1239	1.0205	0.9531	0.8948	0.8784	1.0691	17.6

6E
8081 PESTICIDE INITIAL CALIBRATION

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX-CLP2 ID: 0.53 (mm) Instrument ID: ECD6

Calibration Date: 10/03/12

	CALIBRATION FACTORS								R^2
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	LVL 7	MEAN	%RSD
alpha-BHC	1.7068	1.7328	1.8043	1.7772	1.7612	1.7241	1.7099	1.7452	2.1
beta-BHC	0.7886	0.7507	0.7499	0.7007	0.6746	0.6525	0.6274	0.7063	8.3
delta-BHC	1.3355	1.3664	1.4106	1.3838	1.4129	1.3944	1.3874	1.3844	1.9
gamma-BHC (Lindane)	1.6094	1.6044	1.6375	1.5988	1.5712	1.5315	1.4910	1.5777	3.2
Heptachlor	1.5856	1.5485	1.5510	1.4820	1.4155	1.3165	1.2123	1.4445	9.6
Aldrin	1.5160	1.4979	1.5123	1.4628	1.4083	1.3241	1.2212	1.4204	7.8
Heptachlor epoxide b	1.4476	1.4003	1.3792	1.3046	1.2384	1.1438	1.0491	1.2804	11.3
Endosulfan I	1.2698	1.2439	1.2336	1.1730	1.1176	1.0464	0.9643	1.1498	9.9
Dieldrin	1.3591	1.3384	1.3315	1.2542	1.1663	1.0710	0.9940	1.2164	11.8
4,4'-DDE	1.2998	1.2792	1.2771	1.2008	1.1147	1.0160	0.9308	1.1598	12.4
Endrin	1.5909	1.5373	1.4937	1.4092	1.3284	1.1857	1.1161	1.3802	13.0
Endosulfan II	1.5871	1.5228	1.4855	1.3975	1.3177	1.2030	1.1435	1.3796	12.1
4,4'-DDD	1.4343	1.4084	1.3921	1.3338	1.2712	1.1686	1.1160	1.3035	9.5
Endosulfan sulfate	1.2785	1.2434	1.2172	1.1779	1.1320	1.0535	1.0179	1.1600	8.4
4,4'-DDT	1.3464	1.3100	1.3003	1.2588	1.2128	1.1433	1.1114	1.2404	7.1
Methoxychlor	0.6592	0.6042	0.5527	0.4972	0.4495	0.4126	0.3783	0.5077	17.7
Endrin ketone	1.3456	1.2690	1.2127	1.1525	1.0924	1.0274	1.0120	1.1588	10.8
Endrin aldehyde	1.2587	1.1952	1.1528	1.0937	1.0369	0.9549	0.9102	1.0860	11.7
gamma-Chlordane	1.4955	1.4315	1.4100	1.3398	1.2967	1.2245	1.1522	1.3357	9.1
alpha-Chlordane	1.3740	1.3339	1.3210	1.2563	1.2048	1.1471	1.0808	1.2454	8.6
Hexachlorobutadiene	1.9645	1.8894	1.8576	1.7256	1.6592	1.5549	1.5070	1.7369	10.0
Hexachlorobenzene	1.7774	1.6637	1.6110	1.4932	1.4081	1.3179	1.2412	1.5018	12.9
Tetrachloro-m-xylene	1.6512	1.5834	1.5355	1.4058	1.2945	1.1692	1.0938	1.3905	15.3
Decachlorobiphenyl	1.5427	1.4016	1.2929	1.1902	1.1187	1.0455	1.0196	1.2302	15.7

7E

8081 PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX-CLP1 ID: 0.53 (mm)

Init. Calib. Date: 10/03/12

Lab Ccal ID: INDAE Date/Time Analyzed: 11/20/12,1754

PEST MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ug/L)	NOM AMOUNT (ug/L)	%D
alpha-BHC	4.13	4.10	4.20	21.7	20.0	8.6
beta-BHC	4.50	4.45	4.55	19.3	20.0	-3.3
delta-BHC	4.66	4.61	4.71	19.8	20.0	-1.2
gamma-BHC (Lindane)	4.41	4.37	4.47	20.8	20.0	4.0
Heptachlor	4.85	4.81	4.91	20.6	20.0	3.2
Aldrin	5.13	5.10	5.20	21.1	20.0	5.4
Heptachlor epoxide b	5.70	5.67	5.77	20.3	20.0	1.3
Endosulfan I	6.08	6.05	6.15	21.7	20.0	8.6
Dieldrin	6.30	6.27	6.37	42.0	40.0	5.1
4,4'-DDE	6.01	5.98	6.08	41.1	40.0	2.7
Endrin	6.52	6.49	6.59	37.8	40.0	-5.6
Endosulfan II	6.73	6.70	6.80	40.0	40.0	0.0
4,4'-DDD	6.57	6.53	6.63	41.9	40.0	4.7
Endosulfan sulfate	7.49	7.46	7.56	39.6	40.0	-1.1
4,4'-DDT	6.83	6.79	6.89	37.5	40.0	-6.4
Methoxychlor	7.26	7.22	7.32	175.5	200.0	-12.2
Endrin ketone	7.75	7.72	7.82	46.2	40.0	15.6
Endrin aldehyde	7.10	7.07	7.17	39.0	40.0	-2.4
gamma-Chlordane	5.83	5.79	5.89	20.6	20.0	3.2
alpha-Chlordane	5.95	5.92	6.02	20.2	20.0	1.0
Hexachlorobutadiene	2.20	2.16	2.26	22.1	20.0	10.7
Hexachlorobenzene	4.00	3.95	4.05	21.3	20.0	6.3
Tetrachloro-m-xylene	3.66	3.62	3.72	37.6	40.0	-6.1
Decachlorobiphenyl	8.59	8.56	8.66	38.9	40.0	-2.8

7E

8081 PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX-CLP2 ID: 0.53 (mm)

Init. Calib. Date: 10/03/12

Lab Ccal ID: INDAE Date/Time Analyzed: 11/20/12,1754

PEST MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ug/L)	NOM AMOUNT (ug/L)	%D	
alpha-BHC	4.57	4.54	4.64	20.4	20.0	2.0	
beta-BHC	5.00	4.96	5.06	18.8	20.0	-5.8	
delta-BHC	5.30	5.26	5.36	20.2	20.0	0.8	
gamma-BHC (Lindane)	4.92	4.89	4.99	19.7	20.0	-1.4	
Heptachlor	5.38	5.35	5.45	19.4	20.0	-3.0	
Aldrin	5.72	5.69	5.79	20.0	20.0	-0.1	
Heptachlor epoxide b	6.28	6.24	6.34	19.3	20.0	-3.6	
Endosulfan I	6.66	6.63	6.73	19.3	20.0	-3.6	
Dieldrin	6.92	6.89	6.99	37.8	40.0	-5.6	
4,4'-DDE	6.73	6.70	6.80	38.6	40.0	-3.4	
Endrin	7.21	7.18	7.28	41.0	40.0	2.4	
Endosulfan II	7.40	7.37	7.47	44.1	40.0	10.2	
4,4'-DDD	7.27	7.23	7.33	45.5	40.0	13.8	
Endosulfan sulfate	7.94	7.91	8.01	42.0	40.0	5.0	
4,4'-DDT	7.56	7.52	7.62	38.5	40.0	-3.9	
Methoxychlor	8.14	8.11	8.21	175.7	200.0	-12.2	
Endrin ketone	8.43	8.40	8.50	49.1	40.0	22.9	<-
Endrin aldehyde	7.70	7.66	7.76	43.2	40.0	8.0	
gamma-Chlordane	6.46	6.43	6.53	18.5	20.0	-7.4	
alpha-Chlordane	6.60	6.56	6.66	18.4	20.0	-7.8	
Hexachlorobutadiene	2.37	2.33	2.43	19.6	20.0	-1.8	
Hexachlorobenzene	4.45	4.41	4.51	25.4	20.0	26.9	<-
Tetrachloro-m-xylene	4.00	3.96	4.06	40.3	40.0	0.7	
Decachlorobiphenyl	9.54	9.52	9.62	47.5	40.0	18.6	

FORM VII PEST-2

7E

8081 PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX-CLP1 ID: 0.53 (mm)

Init. Calib. Date: 10/03/12

Lab Ccal ID: INDAE Date/Time Analyzed: 11/20/12,2034

PEST MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ug/L)	NOM AMOUNT (ug/L)	%D
alpha-BHC	4.13	4.10	4.20	21.6	20.0	8.0
beta-BHC	4.50	4.45	4.55	20.0	20.0	-0.1
delta-BHC	4.66	4.61	4.71	21.4	20.0	6.9
gamma-BHC (Lindane)	4.41	4.37	4.47	20.5	20.0	2.7
Heptachlor	4.85	4.81	4.91	20.4	20.0	1.8
Aldrin	5.13	5.10	5.20	20.9	20.0	4.6
Heptachlor epoxide b	5.70	5.67	5.77	20.1	20.0	0.7
Endosulfan I	6.08	6.05	6.15	21.7	20.0	8.4
Dieldrin	6.30	6.27	6.37	41.8	40.0	4.5
4,4'-DDE	6.01	5.98	6.08	40.7	40.0	1.7
Endrin	6.52	6.49	6.59	36.6	40.0	-8.5
Endosulfan II	6.73	6.70	6.80	39.6	40.0	-1.1
4,4'-DDD	6.57	6.53	6.63	41.5	40.0	3.6
Endosulfan sulfate	7.49	7.46	7.56	39.2	40.0	-2.0
4,4'-DDT	6.83	6.79	6.89	36.6	40.0	-8.4
Methoxychlor	7.25	7.22	7.32	173.1	200.0	-13.4
Endrin ketone	7.75	7.72	7.82	46.3	40.0	15.8
Endrin aldehyde	7.10	7.07	7.17	38.8	40.0	-3.1
gamma-Chlordane	5.83	5.79	5.89	20.5	20.0	2.5
alpha-Chlordane	5.95	5.92	6.02	20.1	20.0	0.4
Hexachlorobutadiene	2.20	2.16	2.26	22.3	20.0	11.4
Hexachlorobenzene	4.00	3.95	4.05	21.1	20.0	5.6
Tetrachloro-m-xylene	3.66	3.62	3.72	37.3	40.0	-6.9
Decachlorobiphenyl	8.59	8.56	8.66	39.0	40.0	-2.5

7E

8081 PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX-CLP2 ID: 0.53 (mm)

Init. Calib. Date: 10/03/12

Lab Ccal ID: INDAE Date/Time Analyzed: 11/20/12,2034

PEST MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ug/L)	NOM AMOUNT (ug/L)	%D	
alpha-BHC	4.57	4.54	4.64	20.2	20.0	1.1	
beta-BHC	5.00	4.96	5.06	18.6	20.0	-7.0	
delta-BHC	5.30	5.26	5.36	19.7	20.0	-1.7	
gamma-BHC (Lindane)	4.92	4.89	4.99	19.5	20.0	-2.5	
Heptachlor	5.38	5.35	5.45	19.1	20.0	-4.4	
Aldrin	5.72	5.69	5.79	19.8	20.0	-0.9	
Heptachlor epoxide b	6.28	6.24	6.34	19.1	20.0	-4.7	
Endosulfan I	6.66	6.63	6.73	19.1	20.0	-4.6	
Dieldrin	6.92	6.89	6.99	37.4	40.0	-6.4	
4,4'-DDE	6.73	6.70	6.80	38.2	40.0	-4.4	
Endrin	7.21	7.18	7.28	39.6	40.0	-0.9	
Endosulfan II	7.40	7.37	7.47	43.4	40.0	8.4	
4,4'-DDD	7.27	7.23	7.33	44.9	40.0	12.3	
Endosulfan sulfate	7.94	7.91	8.01	41.5	40.0	3.7	
4,4'-DDT	7.56	7.52	7.62	37.7	40.0	-5.8	
Methoxychlor	8.14	8.11	8.21	174.0	200.0	-13.0	
Endrin ketone	8.43	8.40	8.50	49.3	40.0	23.1	<-
Endrin aldehyde	7.70	7.66	7.76	42.7	40.0	6.8	
gamma-Chlordane	6.46	6.43	6.53	18.3	20.0	-8.3	
alpha-Chlordane	6.60	6.56	6.66	18.2	20.0	-8.8	
Hexachlorobutadiene	2.37	2.33	2.43	19.5	20.0	-2.6	
Hexachlorobenzene	4.45	4.41	4.51	25.1	20.0	25.6	<-
Tetrachloro-m-xylene	4.00	3.96	4.06	40.0	40.0	-0.0	
Decachlorobiphenyl	9.54	9.52	9.62	47.3	40.0	18.2	

FORM 8
PESTICIDE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX-CLP1 ID: 0.53(mm) Instrument ID: ECD6

Init. Calib. Date: 10/03/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

					IS1 AREA	RT	IS2 AREA	RT
				ICAL MIDPT	4060064	3.015	3748709	8.750
				UPPER LIMIT	8120128	3.065	7497418	8.800
				LOWER LIMIT	2030032	2.965	1874354	8.700
	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT	IS2 AREA	RT
01		INDAE	10/03/12	1639	4060064	3.015	3748709	8.750
02		INDAA	10/03/12	1656	4049993	3.015	3734455	8.750
03		INDAB	10/03/12	1714	4090558	3.015	3771845	8.750
04		INDAC	10/03/12	1732	4021073	3.015	3724289	8.750
05		INDAD	10/03/12	1750	4048036	3.015	3782157	8.750
06		INDAF	10/03/12	1808	4083237	3.015	3825703	8.750
07		INDAG	10/03/12	1826	4094375	3.015	3786416	8.750
08		INDAE	11/20/12	1754	4467185	3.003	4273755	8.737
09	VR80MBW1	VR80MBW1	11/20/12	1812	4299599	3.002	4224464	8.735
10	VR80LCSW1	VR80LCSW1	11/20/12	1830	4483054	3.003	4393472	8.735
11	VR80LCSDW1	VR80LCSDW1	11/20/12	1848	4644932	3.003	4513436	8.735
12	HT-01-W-C-12	VR80A	11/20/12	1906	4598125	3.003	4505948	8.732
13	HT-04-W-C-12	VR80B	11/20/12	1923	4417029	3.002	4361955	8.732
14	HT-04-W-C-DU	VR80C	11/20/12	1941	4588525	3.002	4570793	8.732
15	WS-10-W-C-12	VR80D	11/20/12	1959	4563501	3.002	4458277	8.732
16		INDAE	11/20/12	2034	4356127	3.003	4185014	8.738

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- .05 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

FORM 8
PESTICIDE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX-CLP2 ID: 0.53(mm) Instrument ID: ECD6

Init. Calib. Date: 10/03/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

		IS1 AREA	RT	IS2 AREA	RT
	ICAL MIDPT	21032891	3.195	14864285	10.105
	UPPER LIMIT	42065782	3.245	29728570	10.155
	LOWER LIMIT	10516446	3.145	7432142	10.055

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME	IS1 AREA	RT	IS2 AREA	RT
01		INDAE	10/03/12	1639	21032891	3.195	14864285	10.105
02		INDAA	10/03/12	1656	21107593	3.195	14677423	10.106
03		INDAB	10/03/12	1714	21416427	3.195	15039648	10.106
04		INDAC	10/03/12	1732	21029129	3.195	15016060	10.106
05		INDAD	10/03/12	1750	21297295	3.195	15199043	10.107
06		INDAF	10/03/12	1808	21266311	3.195	15407292	10.106
07		INDAG	10/03/12	1826	21395806	3.195	15257890	10.107
08		INDAE	11/20/12	1754	23076296	3.185	13782505	10.082
09	VR80MBW1	VR80MBW1	11/20/12	1812	22268800	3.185	13759898	10.082
10	VR80LCSW1	VR80LCSW1	11/20/12	1830	23416656	3.185	14407841	10.082
11	VR80LCSDW1	VR80LCSDW1	11/20/12	1848	24399823	3.184	14871950	10.082
12	HT-01-W-C-12	VR80A	11/20/12	1906	23792114	3.185	14962876	10.080
13	HT-04-W-C-12	VR80B	11/20/12	1923	22967986	3.184	14438079	10.080
14	HT-04-W-C-DU	VR80C	11/20/12	1941	23600683	3.184	15099149	10.080
15	WS-10-W-C-12	VR80D	11/20/12	1959	23769798	3.184	14973584	10.080
16		INDAE	11/20/12	2034	23550420	3.184	14126548	10.083

IS1 = 1-Bromo-2-Nitrobenzene RT Window = RT +/- .05 min
IS2 = Hexabromobiphenyl

* Indicates value outside QC Limits

PCP/Chlorophenols Analysis
Report and Summary QC Forms

ARI Job ID: VR80

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Extraction Method: SW3510C
Page 1 of 1

Sample ID: HT-01-W-C-121107
SAMPLE

Lab Sample ID: VR80A
LIMS ID: 12-22456
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/14/12
Date Analyzed: 11/20/12 22:59
Instrument/Analyst: ECD1/YZ

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
87-86-5	**Pentachlorophenol**	**0.014**	**0.025**	**0.024 J**

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	74.8%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Extraction Method: SW3510C
Page 1 of 1

Sample ID: HT-04-W-C-121107
SAMPLE

Lab Sample ID: VR80B
LIMS ID: 12-22457
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/14/12
Date Analyzed: 11/20/12 23:36
Instrument/Analyst: ECD1/YZ

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
87-86-5	**Pentachlorophenol**	**0.014**	**0.025**	**0.022 J**

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery

2,4,6-Tribromophenol	95.6%

FORM I

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Extraction Method: SW3510C
Page 1 of 1

Sample ID: HT-04-W-C-dup-121107
SAMPLE

Lab Sample ID: VR80C
LIMS ID: 12-22458
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/14/12
Date Analyzed: 11/21/12 00:12
Instrument/Analyst: ECD1/YZ

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
87-86-5	**Pentachlorophenol**	**0.014**	**0.025**	**0.020 J**

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	98.0%

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Extraction Method: SW3510C

Sample ID: WS-10-W-C-121107
SAMPLE

Lab Sample ID: VR80D
LIMS ID: 12-22459
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Date Extracted: 11/14/12
Date Analyzed: 11/21/12 00:48
Instrument/Analyst: ECD1/YZ

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
87-86-5	Pentachlorophenol	0.014	0.025	< 0.025 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	93.2%

ANALYTICAL RESOURCES INCORPORATED

SW8041 LOW LEVEL CHLOROPHENOLICS SURROGATE RECOVERY SUMMARY

Matrix: Water

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Client ID	TBP	TOT OUT
MB-111412	97.2%	0
LCS-111412	98.2%	0
LCSD-111412	107%	0
HT-01-W-C-121107	74.8%	0
HT-04-W-C-121107	95.6%	0
HT-04-W-C-dup-121107	98.0%	0
WS-10-W-C-121107	93.2%	0

	LCS/MB LIMITS	QC LIMITS
(TBP) = 2,4,6-Tribromophenol	(33-151)	(10-181)

Prep Method: SW3510C
Log Number Range: 12-22456 to 12-22459

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041 **Sample ID: LCS-111412**
Page 1 of 1 **LCS/LCSD**

Lab Sample ID: LCS-111412 QC Report No: VR80-Anchor QEA, LLC
LIMS ID: 12-22456 Project: City of Kenmore
Matrix: Water
Data Release Authorized: TMW
Reported: 11/23/12 Date Received: 11/08/12

Date Extracted LCS/LCSD: 11/14/12 Sample Amount LCS: 500 mL
LCSD: 500 mL
Date Analyzed LCS: 11/20/12 21:47 Final Extract Volume LCS: 5.0 mL
LCSD: 11/20/12 22:23 LCSD: 5.0 mL
Instrument/Analyst LCS: ECD1/YZ Dilution Factor LCS: 1.00
LCSD: ECD1/YZ LCSD: 1.00

Analyte	LCS	Spike Added-LCS	LCS Recovery	LCSD	Spike Added-LCSD	LCSD Recovery	RPD
Pentachlorophenol	0.237	0.250	94.8%	0.240	0.250	96.0%	1.3%

Chlorophenols Surrogate Recovery

	LCS	LCSD
2,4,6-Tribromophenol	98.2%	107%

Results reported in µg/L
RPD calculated using sample concentrations per SW846.

4

CHLOROPHENOL METHOD BLANK SUMMARY

SAMPLE NO.

VR80MBW1

Lab Name: ANALYTICAL RESOURCES INC

Client: ANCHOR QEA

ARI Job No.: VR80

Project: CITY OF KENMORE

Lab Sample ID: VR80MBW1

Lab File ID: 1120A019

Matrix (soil/water) LIQUID

Extraction:(SepF/Cont/Sonc) SW3510C

Sulfur Cleanup (Y/N) Y

Date Extracted: 11/14/12

Date Analyzed (1): 11/20/12

Date Analyzed (2): 11/20/12

Time Analyzed (1): 2110

Time Analyzed (2): 2110

Instrument ID (1): ECD1

Instrument ID (2): ECD1

GC Column (1): STX CLP1 ID: 0.53(mm)

GC Column (2): STX CLP2 ID: 0.53(mm)

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

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	VR80LCSW1	VR80LCSW1	11/20/12	11/20/12
02	VR80LCSDW1	VR80LCSDW1	11/20/12	11/20/12
03	HT-01-W-C-12	VR80A	11/20/12	11/20/12
04	HT-04-W-C-12	VR80B	11/20/12	11/20/12
05	HT-04-W-C-DU	VR80C	11/21/12	11/21/12
06	WS-10-W-C-12	VR80D	11/21/12	11/21/12

ANALYTICAL RESOURCES INCORPORATED

ORGANICS ANALYSIS DATA SHEET
PCP by GC/ECD Method SW8041
Extraction Method: SW3510C

Sample ID: MB-111412
METHOD BLANK

Lab Sample ID: MB-111412
LIMS ID: 12-22456
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: NA
Date Received: NA

Date Extracted: 11/14/12
Date Analyzed: 11/20/12 21:10
Instrument/Analyst: ECD1/YZ

Sample Amount: 500 mL
Final Extract Volume: 5.0 mL
Dilution Factor: 1.00

CAS Number	Analyte	DL	LOQ	Result
87-86-5	Pentachlorophenol	0.014	0.025	< 0.025 U

Reported in µg/L (ppb)

Chlorophenol Surrogate Recovery	
2,4,6-Tribromophenol	97.2%

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 09/21/12

	RT OF STANDARDS						MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	RT	FROM	TO
Pentachlorophenol	21.18	21.17	21.16	21.20	21.15	21.15	21.17	21.13	21.27
2,4,6-Trichloropheno	13.26	13.26	13.26	13.30	13.25	13.25	13.27	13.23	13.37
2,3,6-Trichloropheno	14.26	14.26	14.26	14.29	14.25	14.25	14.26	14.22	14.36
2,4,5-Trichloropheno	16.04	16.02	16.02	16.05	16.00	16.00	16.03	15.98	16.12
2,3,4-Trichloropheno	17.57	17.54	17.53	17.56	17.51	17.51	17.54	17.49	17.63
2,3,5,6-Tetrachlorop	17.33	17.32	17.32	17.36	17.31	17.31	17.33	17.29	17.43
2,3,4,5-Tetrachlorop	20.37	20.35	20.33	20.37	20.31	20.31	20.34	20.30	20.44
2,4-Dichlorophenol	12.72	12.72	12.71	12.75	12.71	12.71	12.72	12.68	12.82
2,4,6-Tribromophenol	18.79	18.78	18.77	18.81	18.76	18.75	18.78	18.74	18.88

6D
CHLOROPHENOL INITIAL CALIBRATION
RETENTION TIME WINDOWS

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 09/21/12

	RT OF STANDARDS						MEAN	RT WINDOW	
COMPOUND	LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	RT	FROM	TO
Pentachlorophenol___	22.91	22.90	22.89	22.93	22.88	22.88	22.90	22.86	23.00
2,4,6-Trichloropheno	14.27	14.27	14.27	14.30	14.26	14.26	14.27	14.23	14.37
2,3,6-Trichloropheno	15.51	15.51	15.51	15.55	15.50	15.50	15.52	15.48	15.62
2,4,5-Trichloropheno	17.45	17.43	17.43	17.46	17.42	17.41	17.44	17.39	17.53
2,3,4-Trichloropheno	19.00	18.98	18.97	19.01	18.96	18.96	18.98	18.94	19.08
2,3,5,6-Tetrachlorop	18.77	18.76	18.75	18.79	18.75	18.75	18.76	18.72	18.86
2,3,4,5-Tetrachlorop	22.04	22.03	22.02	22.06	22.01	22.00	22.03	21.99	22.13
2,4-Dichlorophenol__	13.79	13.78	13.78	13.82	13.77	13.77	13.79	13.75	13.89
2,4,6-Tribromophenol	20.89	20.88	20.87	20.91	20.86	20.86	20.88	20.84	20.98

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 09/21/12

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	77052	71102	62381	56971	51600	44551	0.9999	Q
2,4,6-Trichlorophenol	37800	36793	34435	30695	27572	23819	17.2	A
2,3,6-Trichlorophenol	39363	41432	38253	34053	27204	22897	0.9992	Q
2,4,5-Trichlorophenol	23290	24192	22777	19742	16572	13274	1.0000	Q
2,3,4-Trichlorophenol	35575	30905	28044	24569	21009	17260	1.0000	Q
2,3,5,6-Tetrachloroph	53827	53395	50427	46244	41856	36207	14.8	A
2,3,4,5-Tetrachloroph	50607	45516	41632	36089	31716	27069	0.9998	Q
2,4-Dichlorophenol	2363	1981	1759	1559	1390	1206	0.9998	Q
2,4,6-Tribromophenol	63570	57559	52456	46332	41843	35975	0.9999	Q

AVE RSD	21.0

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A018.d
LVL 2: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A019.d
LVL 3: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A020.d
LVL 4: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A017.d
LVL 5: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A021.d
LVL 6: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A022.d

6E
CHLOROPHENOL INITIAL CALIBRATION
CALIBRATION FACTORS

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Calibration Date: 09/21/12

COMPOUND	CALIBRATION FACTORS LVL 1	LVL 2	LVL 3	LVL 4	LVL 5	LVL 6	R^2/ %RSD	CT
Pentachlorophenol	42596	39717	37527	34681	31627	27985	15.0	A
2,4,6-Trichlorophenol	32528	33312	25170	22050	20938	17684	0.9992	Q
2,3,6-Trichlorophenol	25874	25680	24007	20973	17820	15188	0.9997	Q
2,4,5-Trichlorophenol	12584	13469	15051	12710	10198	7860	0.9996	Q
2,3,4-Trichlorophenol	23072	18508	18408	15761	13094	9728	0.9988	Q
2,3,5,6-Tetrachloroph	33035	31396	31059	28607	26066	23149	12.9	A
2,3,4,5-Tetrachloroph	25112	23550	21899	20040	18059	15675	17.0	A
2,4-Dichlorophenol	1292	1502	1138	970	877	712	0.9993	Q
2,4,6-Tribromophenol	33881	32521	32652	29584	27527	24749	11.7	A
						AVE RSD	19.8	

CT stands for Curve Types:
- A Indicates an Average Response Factor Curve
- L Indicates a Linear Curve
- Q Indicates a Quadratic Curve

CALIBRATION FILES

LVL 1: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A018.d
LVL 2: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A019.d
LVL 3: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A020.d
LVL 4: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A017.d
LVL 5: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A021.d
LVL 6: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A022.d

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 09/21/12 09/21/12

Client Sample No.(PCP): Date Analyzed :11/20/12

Lab Sample ID (PCP): PCPCCAL Time Analyzed :2034

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.22	21.13	21.27	27.4	25.0	9.6
2,4,6-Trichlorophenol	13.32	13.23	13.37	28.1	25.0	12.4
2,3,6-Trichlorophenol	14.32	14.22	14.36	27.2	25.0	8.8
2,4,5-Trichlorophenol	16.07	15.98	16.12	23.2	25.0	-7.2
2,3,4-Trichlorophenol	17.59	17.49	17.63	27.5	25.0	10.0
2,3,5,6-Tetrachlorophenol	17.38	17.29	17.43	27.1	25.0	8.4
2,3,4,5-Tetrachlorophenol	20.39	20.30	20.44	28.3	25.0	13.2
2,4-Dichlorophenol	12.77	12.68	12.82	275	250	10.0
2,4,6-Tribromophenol (surr	18.83	18.74	18.88	28.0	25.0	12.0

AVERAGE %D = 10.2

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 09/21/12 09/21/12

Client Sample No.(PCP): Date Analyzed :11/20/12

Lab Sample ID (PCP): PCPCCAL Time Analyzed :2034

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	22.95	22.86	23.00	26.8	25.0	7.2
2,4,6-Trichlorophenol	14.32	14.23	14.37	26.3	25.0	5.2
2,3,6-Trichlorophenol	15.57	15.48	15.62	25.0	25.0	0.0
2,4,5-Trichlorophenol	17.48	17.39	17.53	20.8	25.0	-16.8
2,3,4-Trichlorophenol	19.03	18.94	19.08	21.6	25.0	-13.6
2,3,5,6-Tetrachlorophenol	18.81	18.72	18.86	25.8	25.0	3.2
2,3,4,5-Tetrachlorophenol	22.07	21.99	22.13	26.6	25.0	6.4
2,4-Dichlorophenol	13.84	13.75	13.89	229	250	-8.4
2,4,6-Tribromophenol (surr	20.93	20.84	20.98	26.4	25.0	5.6

AVERAGE %D = 7.4

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX CLP1 ID: 0.53 (mm)

Init. Calib. Date(s): 09/21/12 09/21/12

Client Sample No.(PCP): Date Analyzed :11/21/12

Lab Sample ID (PCP): PCPCCAL Time Analyzed :0201

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	21.22	21.13	21.27	28.4	25.0	13.6
2,4,6-Trichlorophenol	13.32	13.23	13.37	27.1	25.0	8.4
2,3,6-Trichlorophenol	14.32	14.22	14.36	28.7	25.0	14.8
2,4,5-Trichlorophenol	16.07	15.98	16.12	23.8	25.0	-4.8
2,3,4-Trichlorophenol	17.59	17.49	17.63	28.2	25.0	12.8
2,3,5,6-Tetrachlorophenol	17.38	17.29	17.43	27.9	25.0	11.6
2,3,4,5-Tetrachlorophenol	20.39	20.30	20.44	27.8	25.0	11.2
2,4-Dichlorophenol	12.77	12.68	12.82	280	250	12.0
2,4,6-Tribromophenol (surr	18.83	18.74	18.88	28.1	25.0	12.4

AVERAGE %D = 11.3

7E

CHLOROPHENOL CALIBRATION VERIFICATION SUMMARY

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX CLP2 ID: 0.53 (mm)

Init. Calib. Date(s): 09/21/12 09/21/12

Client Sample No.(PCP): Date Analyzed :11/21/12

Lab Sample ID (PCP): PCPCCAL Time Analyzed :0201

PCP MIX COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT	NOM AMOUNT	%D
Pentachlorophenol	22.95	22.86	23.00	27.7	25.0	10.8
2,4,6-Trichlorophenol	14.33	14.23	14.37	27.4	25.0	9.6
2,3,6-Trichlorophenol	15.57	15.48	15.62	26.2	25.0	4.8
2,4,5-Trichlorophenol	17.49	17.39	17.53	22.1	25.0	-11.6
2,3,4-Trichlorophenol	19.03	18.94	19.08	22.5	25.0	-10.0
2,3,5,6-Tetrachlorophenol	18.81	18.72	18.86	26.8	25.0	7.2
2,3,4,5-Tetrachlorophenol	22.08	21.99	22.13	27.2	25.0	8.8
2,4-Dichlorophenol	13.84	13.75	13.89	238	250	-4.8
2,4,6-Tribromophenol (surr	20.93	20.84	20.98	27.5	25.0	10.0

AVERAGE %D = 8.6

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX CLP1 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 09/21/12 09/21/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 18.81

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCP D	09/21/12	1928	18.76
02		PCP A	09/21/12	2004	18.79
03		PCP B	09/21/12	2041	18.78
04		PCP C	09/21/12	2117	18.77
05		PCP E	09/21/12	2153	18.76
06		PCP F	09/21/12	2230	18.75
07		PCPCCAL	11/20/12	2034	18.83
08	VR80MBW1	VR80MBW1	11/20/12	2110	18.84
09	VR80LCSW1	VR80LCSW1	11/20/12	2147	18.84
10	VR80LCSDW1	VR80LCSDW1	11/20/12	2223	18.84
11	HT-01-W-C-12	VR80A	11/20/12	2259	18.83
12	HT-04-W-C-12	VR80B	11/20/12	2336	18.83
13	HT-04-W-C-DU	VR80C	11/21/12	0012	18.83
14	WS-10-W-C-12	VR80D	11/21/12	0048	18.83
15		PCPCCAL	11/21/12	0201	18.83

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

FORM VIII PCP

CHLOROPHENOL ANALYTICAL SEQUENCE

Lab Name: ANALYTICAL RESOURCES INC Client: ANCHOR QEA

ARI Job No.: VR80 Project: CITY OF KENMORE

GC Column: STX CLP2 ID: 0.53 (mm) Instrument ID: ECD1

Init. Calib. Date(s): 09/21/12 09/21/12

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 20.91

	CLIENT SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #
01		PCP D	09/21/12	1928	20.87
02		PCP A	09/21/12	2004	20.89
03		PCP B	09/21/12	2041	20.88
04		PCP C	09/21/12	2117	20.87
05		PCP E	09/21/12	2153	20.86
06		PCP F	09/21/12	2230	20.86
07		PCPCCAL	11/20/12	2034	20.93
08	VR80MBW1	VR80MBW1	11/20/12	2110	20.94
09	VR80LCSW1	VR80LCSW1	11/20/12	2147	20.94
10	VR80LCSDW1	VR80LCSDW1	11/20/12	2223	20.94
11	HT-01-W-C-12	VR80A	11/20/12	2259	20.93
12	HT-04-W-C-12	VR80B	11/20/12	2336	20.93
13	HT-04-W-C-DU	VR80C	11/21/12	0012	20.93
14	WS-10-W-C-12	VR80D	11/21/12	0048	20.93
15		PCPCCAL	11/21/12	0201	20.93

QC LIMITS

S1 = 2,4,6-Tribromophenol (+/- 0.07 MINUTES)

* Values outside of QC limits.

Metals Analysis
Report and Summary QC Forms

ARI Job ID: VR80

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
HT-01-W-C-121107	VR80A	12-22456	
HT-01-W-C-121107D	VR80ADUP	12-22456	
HT-01-W-C-121107S	VR80ASPK	12-22456	
HT-04-W-C-121107	VR80B	12-22457	
PBW	VR80MB1	12-22457	
LCSW	VR80MB1SPK	12-22457	
HT-04-W-C-dup-1211	VR80C	12-22458	
WS-10-W-C-121107	VR80D	12-22459	
HT-01-W-C-121107	VR80E	12-22460	
HT-01-W-C-121107D	VR80EDUP	12-22460	
HT-01-W-C-121107S	VR80ESPK	12-22460	
HT-04-W-C-121107	VR80F	12-22461	
PBW	VR80MB2	12-22461	
LCSW	VR80MB2SPK	12-22461	
HT-04-W-C-dup-1211	VR80G	12-22462	
WS-10-W-C-121107	VR80H	12-22463	
HT-01-W-C-121107	VR80RA	12-22456	R
HT-01-W-C-121107D	VR80RADUP	12-22456	R
HT-01-W-C-121107S	VR80RASPK	12-22456	R
HT-04-W-C-121107	VR80RB	12-22457	R
PBW	VR80RMB1	12-22457	R

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: _____ Name: Jay Kuhn

Date: 12/11/12 Title: Inorganics Director

Cover Page

INORGANIC ANALYSIS DATA PACKAGE

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

CLIENT ID	ARI ID	ARI LIMS ID	REPREP
LCSW	VR80RMB1SPK	12-22457	R
HT-04-W-C-dup-1211	VR80RC	12-22458	R
WS-10-W-C-121107	VR80RD	12-22459	R
HT-01-W-C-121107	VR80RE	12-22460	R
HT-01-W-C-121107D	VR80REDUP	12-22460	R
HT-01-W-C-121107S	VR80RESPK	12-22460	R
HT-04-W-C-121107	VR80RF	12-22461	R
PBW	VR80RMB2	12-22461	R
LCSW	VR80RMB2SPK	12-22461	R
HT-04-W-C-dup-1211	VR80RG	12-22462	R
WS-10-W-C-121107	VR80RH	12-22463	R

Were ICP interelement corrections applied ?	Yes/No	YES
Were ICP background corrections applied ?	Yes/No	YES
If yes - were raw data generated before application of background corrections ?	Yes/No	NO

Comments: _____

THIS DATA PACKAGE HAS BEEN REVIEWED AND AUTHORIZED FOR RELEASE BY:

Signature: _____ Name: Jay Kuhn

Date: 12/11/17 Title: Inorganics Director

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: HT-01-W-C-121107
SAMPLE

Lab Sample ID: VR80A
LIMS ID: 12-22456
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	MDL	RL	Result	Q
200.8	11/13/12	200.8	11/30/12	7440-36-0	Antimony	0.05	1	1	U
200.8	11/13/12	200.8	11/30/12	**7440-38-2**	**Arsenic**	0.24	1	**2**	
200.8	11/13/12	200.8	11/30/12	**7440-39-3**	**Barium**	0.10	2	**11**	
200.8	11/13/12	200.8	12/04/12	7440-41-7	Beryllium	0.052	0.5	0.5	U
200.8	11/13/12	200.8	11/30/12	7440-43-9	Cadmium	0.050	0.5	0.5	U
3010A	11/13/12	6010C	11/26/12	**7440-70-2**	**Calcium**	11.3	50	**11,100**	
200.8	11/13/12	200.8	11/30/12	7440-47-3	Chromium	0.22	2	2	U
200.8	12/06/12	200.8	12/07/12	**7440-50-8**	**Copper**	0.158	0.5	**2.8**	
200.8	11/13/12	200.8	11/28/12	**7439-89-6**	**Iron**	5.8	20	**480**	
200.8	11/13/12	200.8	11/30/12	**7439-92-1**	**Lead**	0.230	0.5	**0.5**	
3010A	11/13/12	6010C	11/26/12	**7439-95-4**	**Magnesium**	9.6	50	**4,830**	
200.8	11/13/12	200.8	11/30/12	**7439-96-5**	**Manganese**	0.11	2	**111**	
7470A	11/12/12	7470A	11/16/12	7439-97-6	Mercury	0.007	0.1	0.1	U
200.8	11/13/12	200.8	12/04/12	**7440-02-0**	**Nickel**	0.20	1	**2**	
200.8	11/13/12	200.8	11/30/12	7782-49-2	Selenium	0.64	2	2	U
200.8	11/13/12	200.8	11/30/12	7440-22-4	Silver	0.04	1	1	U
200.8	11/13/12	200.8	11/30/12	7440-28-0	Thallium	0.02	1	1	U
200.8	11/13/12	200.8	11/30/12	7440-66-6	Zinc	2.5	20	20	U

Calculated Hardness (mg-CaCO3/L): 48

Reported in ug/L (ppb).
U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
Page 1 of 1

Sample ID: HT-04-W-C-121107
SAMPLE

Lab Sample ID: VR80B
LIMS ID: 12-22457
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	MDL	RL	Result	Q
200.8	11/13/12	200.8	11/30/12	7440-36-0	Antimony	0.05	1	1	U
200.8	11/13/12	200.8	11/30/12	**7440-38-2**	**Arsenic**	0.24	1	**2**	
200.8	11/13/12	200.8	11/30/12	**7440-39-3**	**Barium**	0.10	2	**9**	
200.8	11/13/12	200.8	12/04/12	7440-41-7	Beryllium	0.052	0.5	0.5	U
200.8	11/13/12	200.8	11/30/12	7440-43-9	Cadmium	0.050	0.5	0.5	U
3010A	11/13/12	6010C	11/26/12	**7440-70-2**	**Calcium**	11.3	50	**11,500**	
200.8	11/13/12	200.8	11/30/12	7440-47-3	Chromium	0.22	2	2	U
200.8	12/06/12	200.8	12/07/12	**7440-50-8**	**Copper**	0.158	0.5	**2.6**	
200.8	11/13/12	200.8	11/28/12	**7439-89-6**	**Iron**	5.8	20	**330**	
200.8	11/13/12	200.8	11/30/12	7439-92-1	Lead	0.230	0.5	0.5	U
3010A	11/13/12	6010C	11/26/12	**7439-95-4**	**Magnesium**	9.6	50	**5,060**	
200.8	11/13/12	200.8	11/30/12	**7439-96-5**	**Manganese**	0.11	2	**32**	
7470A	11/12/12	7470A	11/16/12	7439-97-6	Mercury	0.007	0.1	0.1	U
200.8	11/13/12	200.8	12/04/12	**7440-02-0**	**Nickel**	0.20	1	**1**	
200.8	11/13/12	200.8	11/30/12	7782-49-2	Selenium	0.64	2	2	U
200.8	11/13/12	200.8	11/30/12	7440-22-4	Silver	0.04	1	1	U
200.8	11/13/12	200.8	11/30/12	7440-28-0	Thallium	0.02	1	1	U
200.8	11/13/12	200.8	11/30/12	7440-66-6	Zinc	2.5	20	20	U

Calculated Hardness (mg-CaCO3/L): 50

Reported in ug/L (ppb).
U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: HT-04-W-C-dup-121107
SAMPLE

Lab Sample ID: VR80C
LIMS ID: 12-22458
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	MDL	RL	Result	Q
200.8	11/13/12	200.8	11/29/12	7440-36-0	Antimony	0.010	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	**7440-38-2**	**Arsenic**	0.048	0.2	**1.2**	
200.8	11/13/12	200.8	11/29/12	**7440-39-3**	**Barium**	0.020	0.5	**8.7**	
200.8	11/13/12	200.8	11/29/12	7440-41-7	Beryllium	0.021	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-43-9	Cadmium	0.010	0.1	0.1	U
3010A	11/13/12	6010C	11/27/12	**7440-70-2**	**Calcium**	11.3	50	**11,400**	
200.8	11/13/12	200.8	12/06/12	7440-47-3	Chromium	0.045	0.5	0.5	U
200.8	12/06/12	200.8	12/07/12	**7440-50-8**	**Copper**	0.158	0.5	**3.2**	
200.8	11/13/12	200.8	11/28/12	**7439-89-6**	**Iron**	5.8	20	**330**	
200.8	11/13/12	200.8	11/29/12	**7439-92-1**	**Lead**	0.046	0.1	**0.3**	
3010A	11/13/12	6010C	11/27/12	**7439-95-4**	**Magnesium**	9.6	50	**4,970**	
200.8	11/13/12	200.8	12/06/12	**7439-96-5**	**Manganese**	0.022	0.5	**12.4**	
7470A	11/12/12	7470A	11/16/12	7439-97-6	Mercury	0.007	0.1	0.1	U
200.8	11/13/12	200.8	11/29/12	**7440-02-0**	**Nickel**	0.079	0.5	**1.2**	
200.8	11/13/12	200.8	11/29/12	7782-49-2	Selenium	0.127	0.5	0.5	U
200.8	11/13/12	200.8	11/29/12	7440-22-4	Silver	0.008	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-28-0	Thallium	0.004	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-66-6	Zinc	0.50	4	4	U

Calculated Hardness (mg-CaCO3/L): 49

Reported in ug/L (ppb).
U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: WS-10-W-C-121107
SAMPLE

Lab Sample ID: VR80D
LIMS ID: 12-22459
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	MDL	RL	Result	Q
200.8	11/13/12	200.8	11/29/12	7440-36-0	Antimony	0.010	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	**7440-38-2**	**Arsenic**	0.048	0.2	**0.9**	
200.8	11/13/12	200.8	11/29/12	**7440-39-3**	**Barium**	0.020	0.5	**6.2**	
200.8	11/13/12	200.8	11/29/12	7440-41-7	Beryllium	0.021	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-43-9	Cadmium	0.010	0.1	0.1	U
3010A	11/13/12	6010C	11/26/12	**7440-70-2**	**Calcium**	11.3	50	**10,200**	
200.8	11/13/12	200.8	12/06/12	7440-47-3	Chromium	0.11	1	1	U
200.8	12/06/12	200.8	12/07/12	**7440-50-8**	**Copper**	0.158	0.5	**1.6**	
200.8	11/13/12	200.8	11/28/12	**7439-89-6**	**Iron**	5.8	20	**160**	
200.8	11/13/12	200.8	11/29/12	7439-92-1	Lead	0.046	0.1	0.1	U
3010A	11/13/12	6010C	11/26/12	**7439-95-4**	**Magnesium**	9.6	50	**4,210**	
200.8	11/13/12	200.8	12/06/12	**7439-96-5**	**Manganese**	0.06	1	**21**	
7470A	11/12/12	7470A	11/16/12	7439-97-6	Mercury	0.007	0.1	0.1	U
200.8	11/13/12	200.8	11/29/12	**7440-02-0**	**Nickel**	0.079	0.5	**0.7**	
200.8	11/13/12	200.8	11/29/12	7782-49-2	Selenium	0.127	0.5	0.5	U
200.8	11/13/12	200.8	11/29/12	7440-22-4	Silver	0.008	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-28-0	Thallium	0.004	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-66-6	Zinc	0.50	4	4	U

Calculated Hardness (mg-CaCO3/L): 43

Reported in ug/L (ppb).
U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS

Sample ID: HT-01-W-C-121107
MATRIX SPIKE

Lab Sample ID: VR80A
LIMS ID: 12-22456
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	200.8	1 U	24	25	96.0%	
Arsenic	200.8	2	29	25	108%	
Barium	200.8	11	37	25	104%	
Beryllium	200.8	0.5 U	26.0	25.0	104%	
Cadmium	200.8	0.5 U	23.8	25.0	95.2%	
Calcium	6010C	11,100	21,000	10,000	99.0%	
Chromium	200.8	2 U	27	25	108%	
Copper	200.8	2.8	29.5	25.0	107%	
Iron	200.8	480	5,430	5,000	99.0%	
Lead	200.8	0.5	25.4	25.0	99.6%	
Magnesium	6010C	4,830	15,200	10,000	104%	
Manganese	200.8	111	135	25	96.0%	H
Mercury	7470A	0.1 U	1.0	1.0	100%	
Nickel	200.8	2	28	25	104%	
Selenium	200.8	2 U	78	80	97.5%	
Silver	200.8	1 U	24	25	96.0%	
Thallium	200.8	1 U	25	25	100%	
Zinc	200.8	20 U	90	80	112%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked
NR-Not Recovered

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS
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Sample ID: HT-01-W-C-121107
DUPLICATE

Lab Sample ID: VR80A
LIMS ID: 12-22456
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	200.8	1 U	1 U	0.0%	+/- 1	L
Arsenic	200.8	2	2	0.0%	+/- 1	L
Barium	200.8	11	11	0.0%	+/- 2	L
Beryllium	200.8	0.5 U	0.5 U	0.0%	+/- 0.5	L
Cadmium	200.8	0.5 U	0.5 U	0.0%	+/- 0.5	L
Calcium	6010C	11,100	11,400	2.7%	+/- 20%	
Chromium	200.8	2 U	2 U	0.0%	+/- 2	L
Copper	200.8	2.8	3.0	6.9%	+/- 20%	
Iron	200.8	480	460	4.3%	+/- 20%	
Lead	200.8	0.5	0.6	18.2%	+/- 0.5	L
Magnesium	6010C	4,830	4,930	2.0%	+/- 20%	
Manganese	200.8	111	113	1.8%	+/- 20%	
Mercury	7470A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Nickel	200.8	2	2	0.0%	+/- 1	L
Selenium	200.8	2 U	2 U	0.0%	+/- 2	L
Silver	200.8	1 U	1 U	0.0%	+/- 1	L
Thallium	200.8	1 U	1 U	0.0%	+/- 1	L
Zinc	200.8	20 U	20 U	0.0%	+/- 20	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: LAB CONTROL**

Lab Sample ID: VR80LCS
LIMS ID: 12-22457
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	200.8	23.6	25.0	94.4%	
Arsenic	200.8	27.4	25.0	110%	
Barium	200.8	24.3	25.0	97.2%	
Beryllium	200.8	25.1	25.0	100%	
Cadmium	200.8	24.4	25.0	97.6%	
Calcium	6010C	9820	10000	98.2%	
Chromium	200.8	25.9	25.0	104%	
Copper	200.8	25.7	25.0	103%	
Iron	200.8	4800	5000	96.0%	
Lead	200.8	26.3	25.0	105%	
Magnesium	6010C	10300	10000	103%	
Manganese	200.8	25.4	25.0	102%	
Mercury	7470A	2.1	2.0	105%	
Nickel	200.8	28.2	25.0	113%	
Selenium	200.8	83.1	80.0	104%	
Silver	200.8	25.5	25.0	102%	
Thallium	200.8	25.0	25.0	100%	
Zinc	200.8	85	80	106%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
TOTAL METALS **Sample ID: METHOD BLANK**

Lab Sample ID: VR80MB
LIMS ID: 12-22457
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	MDL	RL	Result	Q
200.8	11/13/12	200.8	11/27/12	7440-36-0	Antimony	0.010	0.2	0.2	U
200.8	11/13/12	200.8	11/27/12	7440-38-2	Arsenic	0.048	0.2	0.2	U
200.8	11/13/12	200.8	11/27/12	7440-39-3	Barium	0.020	0.5	0.5	U
200.8	11/13/12	200.8	11/27/12	7440-41-7	Beryllium	0.021	0.2	0.2	U
200.8	11/13/12	200.8	11/27/12	7440-43-9	Cadmium	0.010	0.1	0.1	U
3010A	11/13/12	6010C	11/26/12	7440-70-2	Calcium	11.3	50	50	U
200.8	11/13/12	200.8	11/27/12	7440-47-3	Chromium	0.045	0.5	0.5	U
200.8	12/06/12	200.8	12/07/12	7440-50-8	Copper	0.158	0.5	0.5	U
200.8	11/13/12	200.8	11/28/12	7439-89-6	Iron	5.8	20	20	U
200.8	11/13/12	200.8	11/27/12	7439-92-1	Lead	0.046	0.1	0.1	U
3010A	11/13/12	6010C	11/26/12	7439-95-4	Magnesium	9.6	50	50	U
200.8	11/13/12	200.8	11/27/12	7439-96-5	Manganese	0.022	0.5	0.5	U
7470A	11/12/12	7470A	11/16/12	7439-97-6	Mercury	0.007	0.1	0.1	U
200.8	11/13/12	200.8	11/27/12	7440-02-0	Nickel	0.079	0.5	0.5	U
200.8	11/13/12	200.8	11/27/12	7782-49-2	Selenium	0.127	0.5	0.5	U
200.8	11/13/12	200.8	11/27/12	7440-22-4	Silver	0.008	0.2	0.2	U
200.8	11/13/12	200.8	11/27/12	7440-28-0	Thallium	0.004	0.2	0.2	U
200.8	11/13/12	200.8	11/27/12	7440-66-6	Zinc	0.50	4	4	U

Reported in ug/L (ppb).
U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
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Sample ID: HT-01-W-C-121107
SAMPLE

Lab Sample ID: VR80E
LIMS ID: 12-22460
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	MDL	RL	µg/L	Q
200.8	11/13/12	200.8	11/29/12	7440-36-0	Antimony	0.010	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	**7440-38-2**	**Arsenic**	0.048	0.2	**0.8**	
200.8	11/13/12	200.8	11/29/12	**7440-39-3**	**Barium**	0.020	0.5	**7.4**	
200.8	11/13/12	200.8	11/29/12	7440-41-7	Beryllium	0.021	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-43-9	Cadmium	0.010	0.1	0.1	U
200.8	11/13/12	200.8	12/06/12	7440-47-3	Chromium	0.11	1	1	U
200.8	11/13/12	200.8	11/29/12	**7440-50-8**	**Copper**	0.158	0.5	**1.9**	
200.8	11/13/12	200.8	11/28/12	**7439-89-6**	**Iron**	5.8	20	**110**	
200.8	11/13/12	200.8	11/29/12	**7439-92-1**	**Lead**	0.046	0.1	**0.1**	
200.8	12/06/12	200.8	12/07/12	**7439-96-5**	**Manganese**	0.022	0.5	**2.8**	
7470A	11/12/12	7470A	11/16/12	7439-97-6	Mercury	0.007	0.1	0.1	U
200.8	11/13/12	200.8	11/29/12	**7440-02-0**	**Nickel**	0.079	0.5	**1.1**	
200.8	11/13/12	200.8	11/29/12	7782-49-2	Selenium	0.127	0.5	0.5	U
200.8	11/13/12	200.8	11/29/12	7440-22-4	Silver	0.008	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-28-0	Thallium	0.004	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	**7440-66-6**	**Zinc**	0.50	4	**6**	

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
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Sample ID: HT-04-W-C-121107
SAMPLE

Lab Sample ID: VR80F
LIMS ID: 12-22461
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	MDL	RL	µg/L	Q
200.8	11/13/12	200.8	11/29/12	7440-36-0	Antimony	0.010	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	**7440-38-2**	**Arsenic**	0.048	0.2	**1.0**	
200.8	11/13/12	200.8	11/29/12	**7440-39-3**	**Barium**	0.020	0.5	**7.8**	
200.8	11/13/12	200.8	11/29/12	7440-41-7	Beryllium	0.021	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-43-9	Cadmium	0.010	0.1	0.1	U
200.8	11/13/12	200.8	12/06/12	7440-47-3	Chromium	0.11	1	1	U
200.8	11/13/12	200.8	11/29/12	**7440-50-8**	**Copper**	0.158	0.5	**2.1**	
200.8	11/13/12	200.8	11/28/12	**7439-89-6**	**Iron**	5.8	20	**150**	
200.8	11/13/12	200.8	11/29/12	**7439-92-1**	**Lead**	0.046	0.1	**0.1**	
200.8	12/06/12	200.8	12/07/12	**7439-96-5**	**Manganese**	0.022	0.5	**4.6**	
7470A	11/12/12	7470A	11/16/12	7439-97-6	Mercury	0.007	0.1	0.1	U
200.8	11/13/12	200.8	11/29/12	**7440-02-0**	**Nickel**	0.079	0.5	**1.1**	
200.8	11/13/12	200.8	11/29/12	7782-49-2	Selenium	0.127	0.5	0.5	U
200.8	11/13/12	200.8	11/29/12	7440-22-4	Silver	0.008	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-28-0	Thallium	0.004	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-66-6	Zinc	0.50	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: HT-04-W-C-dup-121107
SAMPLE

Lab Sample ID: VR80G
LIMS ID: 12-22462
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	MDL	RL	µg/L	Q
200.8	11/13/12	200.8	11/29/12	7440-36-0	Antimony	0.010	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	**7440-38-2**	**Arsenic**	0.048	0.2	**1.0**	
200.8	11/13/12	200.8	11/29/12	**7440-39-3**	**Barium**	0.020	0.5	**7.7**	
200.8	11/13/12	200.8	11/29/12	7440-41-7	Beryllium	0.021	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-43-9	Cadmium	0.010	0.1	0.1	U
200.8	11/13/12	200.8	12/06/12	7440-47-3	Chromium	0.11	1	1	U
200.8	11/13/12	200.8	11/29/12	**7440-50-8**	**Copper**	0.158	0.5	**2.0**	
200.8	11/13/12	200.8	11/28/12	**7439-89-6**	**Iron**	5.8	20	**150**	
200.8	11/13/12	200.8	11/29/12	7439-92-1	Lead	0.046	0.1	0.1	U
200.8	12/06/12	200.8	12/07/12	**7439-96-5**	**Manganese**	0.022	0.5	**5.1**	
7470A	11/12/12	7470A	11/16/12	7439-97-6	Mercury	0.007	0.1	0.1	U
200.8	11/13/12	200.8	11/29/12	**7440-02-0**	**Nickel**	0.079	0.5	**1.0**	
200.8	11/13/12	200.8	11/29/12	7782-49-2	Selenium	0.127	0.5	0.5	U
200.8	11/13/12	200.8	11/29/12	7440-22-4	Silver	0.008	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-28-0	Thallium	0.004	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-66-6	Zinc	0.50	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: WS-10-W-C-121107
SAMPLE

Lab Sample ID: VR80H
LIMS ID: 12-22463
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	MDL	RL	µg/L	Q
200.8	11/13/12	200.8	11/29/12	7440-36-0	Antimony	0.010	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	**7440-38-2**	**Arsenic**	0.048	0.2	**0.8**	
200.8	11/13/12	200.8	11/29/12	**7440-39-3**	**Barium**	0.020	0.5	**6.0**	
200.8	11/13/12	200.8	11/29/12	7440-41-7	Beryllium	0.021	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-43-9	Cadmium	0.010	0.1	0.1	U
200.8	11/13/12	200.8	12/06/12	7440-47-3	Chromium	0.11	1	1	U
200.8	11/13/12	200.8	11/29/12	**7440-50-8**	**Copper**	0.158	0.5	**1.2**	
200.8	11/13/12	200.8	11/28/12	**7439-89-6**	**Iron**	5.8	20	**90**	
200.8	11/13/12	200.8	11/29/12	7439-92-1	Lead	0.046	0.1	0.1	U
200.8	12/06/12	200.8	12/07/12	**7439-96-5**	**Manganese**	0.022	0.5	**13.8**	
7470A	11/12/12	7470A	11/16/12	7439-97-6	Mercury	0.007	0.1	0.1	U
200.8	11/13/12	200.8	11/29/12	**7440-02-0**	**Nickel**	0.079	0.5	**0.8**	
200.8	11/13/12	200.8	11/29/12	7782-49-2	Selenium	0.127	0.5	0.5	U
200.8	11/13/12	200.8	11/29/12	7440-22-4	Silver	0.008	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-28-0	Thallium	0.004	0.2	0.2	U
200.8	11/13/12	200.8	11/29/12	7440-66-6	Zinc	0.50	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: HT-01-W-C-121107
MATRIX SPIKE

Lab Sample ID: VR80E
LIMS ID: 12-22460
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

MATRIX SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Spike	Spike Added	% Recovery	Q
Antimony	200.8	0.2 U	24.6	25.0	98.4%	
Arsenic	200.8	0.8	27.8	25.0	108%	
Barium	200.8	7.4	32.8	25.0	102%	
Beryllium	200.8	0.2 U	25.2	25.0	101%	
Cadmium	200.8	0.1 U	24.4	25.0	97.6%	
Chromium	200.8	1 U	25	25	100%	
Copper	200.8	1.9	28.7	25.0	107%	
Iron	200.8	110	5,030	5,000	98.4%	
Lead	200.8	0.1	25.7	25.0	102%	
Manganese	200.8	2.8	28.1	25.0	101%	
Mercury	7470A	0.1 U	1.0	1.0	100%	
Nickel	200.8	1.1	26.7	25.0	102%	
Selenium	200.8	0.5 U	82.5	80.0	103%	
Silver	200.8	0.2 U	24.4	25.0	97.6%	
Thallium	200.8	0.2 U	25.3	25.0	101%	
Zinc	200.8	6	83	80	96.2%	

Reported in µg/L

N-Control Limit Not Met
H-% Recovery Not Applicable, Sample Concentration Too High
NA-Not Applicable, Analyte Not Spiked

Percent Recovery Limits: 75-125%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS
Page 1 of 1

Sample ID: HT-01-W-C-121107
DUPLICATE

Lab Sample ID: VR80E
LIMS ID: 12-22460
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: 11/07/12
Date Received: 11/08/12

MATRIX DUPLICATE QUALITY CONTROL REPORT

Analyte	Analysis Method	Sample	Duplicate	RPD	Control Limit	Q
Antimony	200.8	0.2 U	0.2 U	0.0%	+/- 0.2	L
Arsenic	200.8	0.8	0.8	0.0%	+/- 0.2	L
Barium	200.8	7.4	7.6	2.7%	+/- 20%	
Beryllium	200.8	0.2 U	0.2 U	0.0%	+/- 0.2	L
Cadmium	200.8	0.1 U	0.1 U	0.0%	+/- 0.1	L
Chromium	200.8	1 U	1 U	0.0%	+/- 1	L
Copper	200.8	1.9	2.0	5.1%	+/- 0.5	L
Iron	200.8	110	120	8.7%	+/- 20%	
Lead	200.8	0.1	0.1	0.0%	+/- 0.1	L
Manganese	200.8	2.8	2.7	3.6%	+/- 20%	
Mercury	7470A	0.1 U	0.1 U	0.0%	+/- 0.1	L
Nickel	200.8	1.1	1.1	0.0%	+/- 0.5	L
Selenium	200.8	0.5 U	0.5 U	0.0%	+/- 0.5	L
Silver	200.8	0.2 U	0.2 U	0.0%	+/- 0.2	L
Thallium	200.8	0.2 U	0.2 U	0.0%	+/- 0.2	L
Zinc	200.8	6	6	0.0%	+/- 4	L

Reported in µg/L

*-Control Limit Not Met
L-RPD Invalid, Limit = Detection Limit

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS

Sample ID: LAB CONTROL

Lab Sample ID: VR80LCS
LIMS ID: 12-22461
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: NA
Date Received: NA

BLANK SPIKE QUALITY CONTROL REPORT

Analyte	Analysis Method	Spike Found	Spike Added	% Recovery	Q
Antimony	200.8	24.0	25.0	96.0%	
Arsenic	200.8	27.8	25.0	111%	
Barium	200.8	24.4	25.0	97.6%	
Beryllium	200.8	24.7	25.0	98.8%	
Cadmium	200.8	24.5	25.0	98.0%	
Chromium	200.8	26.5	25.0	106%	
Copper	200.8	29.4	25.0	118%	
Iron	200.8	5080	5000	102%	
Lead	200.8	26.7	25.0	107%	
Manganese	200.8	25.7	25.0	103%	
Mercury	7470A	2.1	2.0	105%	
Nickel	200.8	29.0	25.0	116%	
Selenium	200.8	83.3	80.0	104%	
Silver	200.8	25.9	25.0	104%	
Thallium	200.8	25.5	25.0	102%	
Zinc	200.8	89	80	111%	

Reported in µg/L

N-Control limit not met
Control Limits: 80-120%

ANALYTICAL RESOURCES INCORPORATED

INORGANICS ANALYSIS DATA SHEET
DISSOLVED METALS **Sample ID: METHOD BLANK**

Lab Sample ID: VR80MB
LIMS ID: 12-22461
Matrix: Water
Data Release Authorized:
Reported: 12/11/12

QC Report No: VR80-Anchor QEA, LLC
Project: City of Kenmore

Date Sampled: NA
Date Received: NA

Prep Meth	Prep Date	Analysis Method	Analysis Date	CAS Number	Analyte	MDL	RL	µg/L	Q
200.8	11/13/12	200.8	11/27/12	7440-36-0	Antimony	0.010	0.2	0.2	U
200.8	11/13/12	200.8	11/27/12	7440-38-2	Arsenic	0.048	0.2	0.2	U
200.8	11/13/12	200.8	11/27/12	7440-39-3	Barium	0.020	0.5	0.5	U
200.8	11/13/12	200.8	11/27/12	7440-41-7	Beryllium	0.021	0.2	0.2	U
200.8	11/13/12	200.8	11/27/12	7440-43-9	Cadmium	0.010	0.1	0.1	U
200.8	11/13/12	200.8	11/27/12	7440-47-3	Chromium	0.045	0.5	0.5	U
200.8	11/13/12	200.8	11/27/12	7440-50-8	Copper	0.158	0.5	0.5	U
200.8	11/13/12	200.8	11/28/12	7439-89-6	Iron	5.8	20	20	U
200.8	11/13/12	200.8	11/27/12	7439-92-1	Lead	0.046	0.1	0.1	U
200.8	12/06/12	200.8	12/07/12	7439-96-5	Manganese	0.022	0.5	0.5	U
7470A	11/12/12	7470A	11/16/12	7439-97-6	Mercury	0.007	0.1	0.1	U
200.8	11/13/12	200.8	11/27/12	7440-02-0	Nickel	0.079	0.5	0.5	U
200.8	11/13/12	200.8	11/27/12	7782-49-2	Selenium	0.127	0.5	0.5	U
200.8	11/13/12	200.8	11/27/12	7440-22-4	Silver	0.008	0.2	0.2	U
200.8	11/13/12	200.8	11/27/12	7440-28-0	Thallium	0.004	0.2	0.2	U
200.8	11/13/12	200.8	11/27/12	7440-66-6	Zinc	0.50	4	4	U

U-Analyte undetected at given RL
RL-Reporting Limit

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Antimony	SB	PMS	MS112781	50.0	49.14	**98.3**	50.0	50.54	**101.1**	50.46	**100.9**	48.93	**97.9**	48.54	**97.1**	49.10	**98.2**
Arsenic	AS	PMS	MS112781	50.0	51.86	**103.7**	50.0	50.62	**101.2**	50.38	**100.8**	50.68	**101.4**	51.20	**102.4**	51.16	**102.3**
Barium	BA	PMS	MS112781	50.0	49.39	**98.8**	50.0	49.72	**99.4**	50.22	**100.4**	46.31	**92.6**	46.76	**93.5**	47.68	**95.4**
Beryllium	BE	PMS	MS112781	50.0	50.33	**100.7**	50.0	51.00	**102.0**	50.21	**100.4**	52.01	**104.0**	51.41	**102.8**	51.83	**103.7**
Cadmium	CD	PMS	MS112781	50.0	48.85	**97.7**	50.0	50.79	**101.6**	50.47	**100.9**	50.26	**100.5**	50.41	**100.8**	50.80	**101.6**
Calcium	CA	ICP	IP112671	2000.0	1994.41	**99.7**	2000.0	1932.94	**96.6**	1949.03	**97.5**	1987.61	**99.4**	1982.88	**99.1**	1933.27	**96.7**
Chromium	CR	PMS	MS112781	50.0	49.75	**99.5**	50.0	51.65	**103.3**	50.63	**101.3**	50.72	**101.4**	52.65	**105.3**	52.55	**105.1**
Copper	CU	PMS	MS112781	50.0	51.51	**103.0**	50.0	51.24	**102.5**	50.90	**101.8**	55.16	**110.3**	55.05	**110.1**	54.61	**109.2**
Lead	PB	PMS	MS112781	50.0	50.67	**101.3**	50.0	50.88	**101.8**	52.02	**104.0**	50.34	**100.7**	51.90	**103.8**	51.42	**102.8**
Magnesium	MG	ICP	IP112671	2000.0	2081.03	**104.1**	2000.0	2019.03	**101.0**	2038.73	**101.9**	2077.72	**103.9**	2072.22	**103.6**	2025.42	**101.3**
Manganese	MN	PMS	MS112781	50.0	50.13	**100.3**	50.0	51.32	**102.6**	50.94	**101.9**	50.95	**101.9**	51.93	**103.9**	51.73	**103.5**
Mercury	HG	CVA	HG111601	8.0	7.95	**99.4**	4.0	4.00	**100.0**	4.00	**100.0**	4.02	**100.5**				
Nickel	NI	PMS	MS112781	50.0	50.28	**100.6**	50.0	49.96	**99.9**	50.26	**100.5**	54.32	**108.6**	55.22	**110.4**	55.01	**110.0**
Selenium	SE	PMS	MS112781	80.0	81.21	**101.5**	50.0	51.02	**102.0**	50.69	**101.4**	50.19	**100.4**	50.94	**101.9**	51.36	**102.7**
Silver	AG	PMS	MS112781	50.0	50.59	**101.2**	50.0	50.66	**101.3**	50.29	**100.6**	51.08	**102.2**	51.34	**102.7**	51.76	**103.5**
Thallium	TL	PMS	MS112781	50.0	47.99	**96.0**	50.0	48.56	**97.1**	49.26	**98.5**	48.21	**96.4**	49.44	**98.9**	49.13	**98.3**
Zinc	ZN	PMS	MS112781	50.0	50.09	**100.2**	50.0	51.58	**103.2**	51.27	**102.5**	54.71	**109.4**	54.35	**108.7**	54.21	**108.4**

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS:ug/L

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Antimony	SB	PMS	MS112781	50.0	49.04	**98.1**	49.49	**99.0**	49.75	**99.5**						
Arsenic	AS	PMS	MS112781	50.0	50.42	**100.8**	50.80	**101.6**	50.87	**101.7**						
Barium	BA	PMS	MS112781	50.0	48.39	**96.8**	48.39	**96.8**	49.29	**98.6**						
Beryllium	BE	PMS	MS112781	50.0	49.31	**98.6**	51.60	**103.2**	51.91	**103.8**						
Cadmium	CD	PMS	MS112781	50.0	50.61	**101.2**	50.99	**102.0**	50.52	**101.0**						
Calcium	CA	ICP	IP112671	2000.0	1903.98	**95.2**	1914.22	**95.7**								
Chromium	CR	PMS	MS112781	50.0	51.05	**102.1**	51.56	**103.1**	51.40	**102.8**						
Copper	CU	PMS	MS112781	50.0	53.15	**106.3**	53.21	**106.4**	52.77	**105.5**						
Lead	PB	PMS	MS112781	50.0	52.29	**104.6**	52.46	**104.9**	52.42	**104.8**						
Magnesium	MG	ICP	IP112671	2000.0	1979.38	**99.0**	2004.47	**100.2**								
Manganese	MN	PMS	MS112781	50.0	50.69	**101.4**	50.19	**100.4**	51.63	**103.3**						
Mercury	HG	CVA	HG111601	4.0												
Nickel	NI	PMS	MS112781	50.0	53.31	**106.6**	52.41	**104.8**	52.47	**104.9**						
Selenium	SE	PMS	MS112781	50.0	52.05	**104.1**	51.13	**102.3**	50.87	**101.7**						
Silver	AG	PMS	MS112781	50.0	50.30	**100.6**	50.44	**100.9**	50.60	**101.2**						
Thallium	TL	PMS	MS112781	50.0	50.21	**100.4**	49.85	**99.7**	49.74	**99.5**						
Zinc	ZN	PMS	MS112781	50.0	52.93	**105.9**	53.06	**106.1**	52.72	**105.4**						

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

UNITS:ug/L

SDG: VR80

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Calcium	CA	ICP	IP112771	2000.0	1998.87	**99.9**	2000.0	2082.91	**104.1**	1985.04	**99.3**	2028.17	**101.4**	2104.42	**105.2**	2086.15	**104.3**
Iron	FE	PMS	MS112881	5000.0	5005.50	**100.1**	5000.0	5124.39	**102.5**	5358.79	**107.2**	5206.03	**104.1**	5273.58	**105.5**	5232.64	**104.7**
Magnesium	MG	ICP	IP112771	2000.0	2072.69	**103.6**	2000.0	2159.90	**108.0**	2075.14	**103.8**	2112.35	**105.6**	2187.29	**109.4**	2163.68	**108.2**

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS: ug/L

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Calcium	CA	ICP	IP112771	2000.0	1989.79	**99.5**	4525.73	**226.3**	8846.01	**442.3**	1956.92	**97.8**	2044.16	**102.2**	1935.33	**96.8**
Iron	FE	PMS	MS112881	5000.0												
Magnesium	MG	ICP	IP112771	2000.0	2077.57	**103.9**	11389.92	**569.5**	13134.48	**656.7**	2003.39	**100.2**	1986.97	**99.3**	2017.08	**100.9**

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Antimony	SB	PMS	MS112981	50.0	47.94	**95.9**	50.0	49.71	**99.4**	48.59	**97.2**	48.92	**97.8**	48.94	**97.9**	48.96	**97.9**
Arsenic	AS	PMS	MS112981	50.0	50.92	**101.8**	50.0	50.59	**101.2**	49.99	**100.0**	49.75	**99.5**	51.25	**102.5**	50.34	**100.7**
Barium	BA	PMS	MS112981	50.0	49.40	**98.8**	50.0	50.01	**100.0**	50.28	**100.6**	49.76	**99.5**	48.67	**97.3**	49.50	**99.0**
Beryllium	BE	PMS	MS112981	50.0	49.10	**98.2**	50.0	50.18	**100.4**	49.50	**99.0**	49.58	**99.2**	53.30	**106.6**	50.12	**100.2**
Cadmium	CD	PMS	MS112981	50.0	48.41	**96.8**	50.0	49.69	**99.4**	49.76	**99.5**	49.39	**98.8**	48.48	**97.0**	49.22	**98.4**
Copper	CU	PMS	MS112981	50.0	49.24	**98.5**	50.0	50.39	**100.8**	49.56	**99.1**	49.30	**98.6**	52.74	**105.5**	50.28	**100.6**
Lead	PB	PMS	MS112981	50.0	49.90	**99.8**	50.0	50.00	**100.0**	50.80	**101.6**	50.44	**100.9**	47.32	**94.6**	49.33	**98.7**
Nickel	NI	PMS	MS112981	50.0	50.07	**100.1**	50.0	51.08	**102.2**	50.99	**102.0**	49.09	**98.2**	53.20	**106.4**	50.81	**101.6**
Selenium	SE	PMS	MS112981	80.0	81.01	**101.3**	50.0	51.41	**102.8**	52.97	**105.9**	50.24	**100.5**	50.19	**100.4**	50.27	**100.5**
Silver	AG	PMS	MS112981	50.0	50.14	**100.3**	50.0	49.81	**99.6**	49.89	**99.8**	49.61	**99.2**	49.32	**98.6**	49.46	**98.9**
Thallium	TL	PMS	MS112981	50.0	50.52	**101.0**	50.0	50.08	**100.2**	51.15	**102.3**	50.73	**101.5**	47.07	**94.1**	49.49	**99.0**
Zinc	ZN	PMS	MS112981	50.0	49.50	**99.0**	50.0	51.33	**102.7**	50.44	**100.9**	50.06	**100.1**	52.20	**104.4**	50.52	**101.0**

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

UNITS:ug/L

SDG: VR80

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Antimony	SB	PMS	MS112981	50.0	49.20	**98.4**										
Arsenic	AS	PMS	MS112981	50.0	49.95	**99.9**										
Barium	BA	PMS	MS112981	50.0	49.15	**98.3**										
Beryllium	BE	PMS	MS112981	50.0	51.04	**102.1**										
Cadmium	CD	PMS	MS112981	50.0	49.76	**99.5**										
Copper	CU	PMS	MS112981	50.0	50.32	**100.6**										
Lead	PB	PMS	MS112981	50.0	48.94	**97.9**										
Nickel	NI	PMS	MS112981	50.0	51.12	**102.2**										
Selenium	SE	PMS	MS112981	50.0	51.02	**102.0**										
Silver	AG	PMS	MS112981	50.0	50.45	**100.9**										
Thallium	TL	PMS	MS112981	50.0	49.27	**98.5**										
Zinc	ZN	PMS	MS112981	50.0	50.85	**101.7**										

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS:ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Antimony	SB	PMS	MS113081	50.0	48.47	**96.9**	50.0	50.53	**101.1**	49.33	**98.7**	48.94	**97.9**	49.48	**99.0**	48.78	**97.6**
Arsenic	AS	PMS	MS113081	50.0	50.33	**100.7**	50.0	49.64	**99.3**	49.81	**99.6**	49.94	**99.9**	50.93	**101.9**	51.12	**102.2**
Barium	BA	PMS	MS113081	50.0	49.10	**98.2**	50.0	50.07	**100.1**	48.88	**97.8**	49.10	**98.2**	50.08	**100.2**	49.72	**99.4**
Cadmium	CD	PMS	MS113081	50.0	48.43	**96.9**	50.0	50.01	**100.0**	49.42	**98.8**	49.01	**98.0**	48.18	**96.4**	47.86	**95.7**
Chromium	CR	PMS	MS113081	50.0	49.79	**99.6**	50.0	50.09	**100.2**	50.45	**100.9**	49.92	**99.8**	50.81	**101.6**	51.51	**103.0**
Lead	PB	PMS	MS113081	50.0	49.26	**98.5**	50.0	49.76	**99.5**	48.91	**97.8**	47.78	**95.6**	48.26	**96.5**	48.53	**97.1**
Manganese	MN	PMS	MS113081	50.0	49.69	**99.4**	50.0	49.64	**99.3**	49.13	**98.3**	49.16	**98.3**	48.25	**96.5**	49.38	**98.8**
Selenium	SE	PMS	MS113081	80.0	76.40	**95.5**	50.0	48.16	**96.3**	48.17	**96.3**	48.51	**97.0**	46.51	**93.0**	46.60	**93.2**
Silver	AG	PMS	MS113081	50.0	49.89	**99.8**	50.0	49.94	**99.9**	49.45	**98.9**	50.34	**100.7**	48.92	**97.8**	48.45	**96.9**
Thallium	TL	PMS	MS113081	50.0	47.97	**95.9**	50.0	48.57	**97.1**	47.44	**94.9**	47.67	**95.3**	47.63	**95.3**	47.94	**95.9**
Zinc	ZN	PMS	MS113081	50.0	49.95	**99.9**	50.0	50.29	**100.6**	51.30	**102.6**	50.47	**100.9**	51.92	**103.8**	52.09	**104.2**

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Beryllium	BE	PMS	MS120481	50.0	48.46	**96.9**	50.0	48.53	**97.1**	49.67	**99.3**	48.37	**96.7**				
Nickel	NI	PMS	MS120481	50.0	50.50	**101.0**	50.0	48.89	**97.8**	47.19	**94.4**	49.42	**98.8**				

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS: ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Chromium	CR	PMS	MS120681	50.0	48.51	**97.0**	50.0	48.32	**96.6**	49.02	**98.0**	47.73	**95.5**	48.96	**97.9**	49.36	**98.7**
Manganese	MN	PMS	MS120681	50.0	49.30	**98.6**	50.0	48.94	**97.9**	50.21	**100.4**	49.17	**98.3**	49.99	**100.0**	50.13	**100.3**

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS: ug/L

ANALYTE	EL	M	RUN	CCVTV	CCV6	%R	CCV7	%R	CCV8	%R	CCV9	%R	CCV10	%R	CCV11	%R
Chromium	CR	PMS	MS120681	50.0	49.78	**99.6**	48.36	**96.7**	48.79	**97.6**						
Manganese	MN	PMS	MS120681	50.0	49.88	**99.8**	49.79	**99.6**	50.71	**101.4**						

Control Limits: Mercury 80-120; Other Metals 90-110

Calibration Verification

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS:ug/L

ANALYTE	EL	M	RUN	ICVTV	ICV	%R	CCVTV	CCV1	%R	CCV2	%R	CCV3	%R	CCV4	%R	CCV5	%R
Copper	CU	PMS	MS120711	50.0	52.02	**104.0**	50.0	49.91	**99.8**	50.36	**100.7**	50.50	**101.0**	49.52	**99.0**		
Manganese	MN	PMS	MS120711	50.0	51.02	**102.0**	50.0	49.26	**98.5**	49.06	**98.1**	47.40	**94.8**	48.49	**97.0**		

Control Limits: Mercury 80-120; Other Metals 90-110

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

UNITS:ug/L

SDG: VR80

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Antimony	SB	PMS	MS112781	0.2	0.21	**105.0**										
Arsenic	AS	PMS	MS112781	0.2	0.22	**110.0**										
Barium	BA	PMS	MS112781	0.5	0.52	**104.0**										
Beryllium	BE	PMS	MS112781	0.2	0.19	**95.0**										
Cadmium	CD	PMS	MS112781	0.1	0.11	**110.0**										
Calcium	CA	ICP	IP112671	50.0	49.20	**98.4**	51.46	**102.9**	54.15	**108.3**						
Chromium	CR	PMS	MS112781	0.5	0.54	**108.0**										
Copper	CU	PMS	MS112781	0.5	0.56	**112.0**										
Lead	PB	PMS	MS112781	0.1	0.13	**130.0**										
Magnesium	MG	ICP	IP112671	50.0	51.14	**102.3**	53.60	**107.2**	55.92	**111.8**						
Manganese	MN	PMS	MS112781	0.5	0.55	**110.0**										
Mercury	HG	CVA	HG111601	0.1	0.09	**90.0**										
Nickel	NI	PMS	MS112781	0.5	0.53	**106.0**										
Selenium	SE	PMS	MS112781	0.5	0.50	**100.0**										
Silver	AG	PMS	MS112781	0.2	0.21	**105.0**										
Thallium	TL	PMS	MS112781	0.2	0.22	**110.0**										
Zinc	ZN	PMS	MS112781	4.0	4.45	**111.3**										

Control Limits: no control limits have been established by the EPA at this time.

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

UNITS: ug/L

SDG: VR80

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Calcium	CA	ICP	IP112771	50.0	49.66	**99.3**	49.19	**98.4**	47.70	**95.4**						
Iron	FE	PMS	MS112881	20.0	19.97	**99.9**										
Magnesium	MG	ICP	IP112771	50.0	51.27	**102.5**	47.76	**95.5**	47.47	**94.9**						
Antimony	SB	PMS	MS112981	0.2	0.18	**90.0**										
Arsenic	AS	PMS	MS112981	0.2	0.23	**115.0**										
Barium	BA	PMS	MS112981	0.5	0.51	**102.0**										
Beryllium	BE	PMS	MS112981	0.2	0.20	**100.0**										
Cadmium	CD	PMS	MS112981	0.1	0.10	**100.0**										
Copper	CU	PMS	MS112981	0.5	0.54	**108.0**										
Lead	PB	PMS	MS112981	0.1	0.11	**110.0**										
Nickel	NI	PMS	MS112981	0.5	0.48	**96.0**										
Selenium	SE	PMS	MS112981	0.5	0.64	**128.0**										
Silver	AG	PMS	MS112981	0.2	0.21	**105.0**										
Thallium	TL	PMS	MS112981	0.2	0.22	**110.0**										
Zinc	ZN	PMS	MS112981	4.0	4.10	**102.5**										

Control Limits: no control limits have been established by the EPA at this time.

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

UNITS: ug/L

SDG: VR80

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Antimony	SB	PMS	MS113081	0.2	0.20	**100.0**										
Arsenic	AS	PMS	MS113081	0.2	0.25	**125.0**										
Barium	BA	PMS	MS113081	0.5	0.51	**102.0**										
Cadmium	CD	PMS	MS113081	0.1	0.11	**110.0**										
Chromium	CR	PMS	MS113081	0.5	0.57	**114.0**										
Lead	PB	PMS	MS113081	0.1	0.11	**110.0**										
Manganese	MN	PMS	MS113081	0.5	0.51	**102.0**										
Selenium	SE	PMS	MS113081	0.5	0.52	**104.0**										
Silver	AG	PMS	MS113081	0.2	0.21	**105.0**										
Thallium	TL	PMS	MS113081	0.2	0.21	**105.0**										
Zinc	ZN	PMS	MS113081	4.0	4.23	**105.8**										

Control Limits: no control limits have been established by the EPA at this time.

CRDL Standard

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

UNITS: ug/L

SDG: VR80

ANALYTE	EL	M	RUN	CRA/I TV	CR-1	%R	CR-2	%R	CR-3	%R	CR-4	%R	CR-5	%R	CR-6	%R
Beryllium	BE	PMS	MS120481	0.2	0.19	**95.0**										
Nickel	NI	PMS	MS120481	0.5	0.52	**104.0**										
Chromium	CR	PMS	MS120681	0.5	0.53	**106.0**										
Manganese	MN	PMS	MS120681	0.5	0.51	**102.0**										
Copper	CU	PMS	MS120711	0.5	0.53	**106.0**										
Manganese	MN	PMS	MS120711	0.5	0.48	**96.0**										

Control Limits: no control limits have been established by the EPA at this time.

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS:ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Antimony	SB	PMS	MS112781	60.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Arsenic	AS	PMS	MS112781	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Barium	BA	PMS	MS112781	200.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Beryllium	BE	PMS	MS112781	5.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Cadmium	CD	PMS	MS112781	5.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Calcium	CA	ICP	IP112671	5000.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Chromium	CR	PMS	MS112781	10.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Copper	CU	PMS	MS112781	25.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	PB	PMS	MS112781	3.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Magnesium	MG	ICP	IP112671	5000.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Manganese	MN	PMS	MS112781	15.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Mercury	HG	CVA	HG111601	0.2	0.1	0.1	U	0.1	U	0.1	U	0.1	U				
Nickel	NI	PMS	MS112781	40.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Selenium	SE	PMS	MS112781	5.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Silver	AG	PMS	MS112781	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Thallium	TL	PMS	MS112781	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Zinc	ZN	PMS	MS112781	20.0	4.0	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Antimony	SB	PMS	MS112781	60.0	0.2	0.2	U	0.2	U	0.2	U						
Arsenic	AS	PMS	MS112781	10.0	0.2	0.2	U	0.2	U	0.2	U						
Barium	BA	PMS	MS112781	200.0	0.5	0.5	U	0.5	U	0.5	U						
Beryllium	BE	PMS	MS112781	5.0	0.2	0.2	U	0.2	U	0.2	U						
Cadmium	CD	PMS	MS112781	5.0	0.1	0.1	U	0.1	U	0.1	U						
Calcium	CA	ICP	IP112671	5000.0	50.0	50.0	U	50.0	U	50.0	U						
Chromium	CR	PMS	MS112781	10.0	0.5	0.5	U	0.5	U	0.5	U						
Copper	CU	PMS	MS112781	25.0	0.5	0.5	U	0.5	U	0.5	U						
Lead	PB	PMS	MS112781	3.0	0.1	0.1	U	0.1	U	0.1	U						
Magnesium	MG	ICP	IP112671	5000.0	50.0	50.0	U	50.0	U	50.0	U						
Manganese	MN	PMS	MS112781	15.0	0.5	0.5	U	0.5	U	0.5	U						
Mercury	HG	CVA	HG111601	0.2	0.1												
Nickel	NI	PMS	MS112781	40.0	0.5	0.5	U	0.5	U	0.5	U						
Selenium	SE	PMS	MS112781	5.0	0.5	0.5	U	0.5	U	0.5	U						
Silver	AG	PMS	MS112781	10.0	0.2	0.2	U	0.2	U	0.2	U						
Thallium	TL	PMS	MS112781	10.0	0.2	0.2	U	0.2	U	0.2	U						
Zinc	ZN	PMS	MS112781	20.0	4.0	4.0	U	4.0	U	4.0	U						

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

UNITS: ug/L

SDG: VR80

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Calcium	CA	ICP	IP112771	5000.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Iron	FE	PMS	MS112881	100.0	20.0	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U	20.0	U
Magnesium	MG	ICP	IP112771	5000.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Calcium	CA	ICP	IP112771	5000.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U
Iron	FE	PMS	MS112881	100.0	20.0												
Magnesium	MG	ICP	IP112771	5000.0	50.0	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U	50.0	U

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS:ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Antimony	SB	PMS	MS112981	60.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Arsenic	AS	PMS	MS112981	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Barium	BA	PMS	MS112981	200.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Beryllium	BE	PMS	MS112981	5.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Cadmium	CD	PMS	MS112981	5.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Copper	CU	PMS	MS112981	25.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	PB	PMS	MS112981	3.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Nickel	NI	PMS	MS112981	40.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Selenium	SE	PMS	MS112981	5.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Silver	AG	PMS	MS112981	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Thallium	TL	PMS	MS112981	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Zinc	ZN	PMS	MS112981	20.0	4.0	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Antimony	SB	PMS	MS112981	60.0	0.2	0.2	U										
Arsenic	AS	PMS	MS112981	10.0	0.2	0.2	U										
Barium	BA	PMS	MS112981	200.0	0.5	0.5	U										
Beryllium	BE	PMS	MS112981	5.0	0.2	0.2	U										
Cadmium	CD	PMS	MS112981	5.0	0.1	0.1	U										
Copper	CU	PMS	MS112981	25.0	0.5	0.5	U										
Lead	PB	PMS	MS112981	3.0	0.1	0.1	U										
Nickel	NI	PMS	MS112981	40.0	0.5	0.5	U										
Selenium	SE	PMS	MS112981	5.0	0.5	0.5	U										
Silver	AG	PMS	MS112981	10.0	0.2	0.2	U										
Thallium	TL	PMS	MS112981	10.0	0.2	0.2	U										
Zinc	ZN	PMS	MS112981	20.0	4.0	4.0	U										

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS:ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Antimony	SB	PMS	MS113081	60.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Arsenic	AS	PMS	MS113081	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Barium	BA	PMS	MS113081	200.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Cadmium	CD	PMS	MS113081	5.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Chromium	CR	PMS	MS113081	10.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Lead	PB	PMS	MS113081	3.0	0.1	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U	0.1	U
Manganese	MN	PMS	MS113081	15.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Selenium	SE	PMS	MS113081	5.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Silver	AG	PMS	MS113081	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Thallium	TL	PMS	MS113081	10.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U	0.2	U
Zinc	ZN	PMS	MS113081	20.0	4.0	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U	4.0	U

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS:ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Beryllium	BE	PMS	MS120481	5.0	0.2	0.2	U	0.2	U	0.2	U	0.2	U				
Nickel	NI	PMS	MS120481	40.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U				

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Chromium	CR	PMS	MS120681	10.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Manganese	MN	PMS	MS120681	15.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS: ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	CCB6	C	CCB7	C	CCB8	C	CCB9	C	CCB10	C	CCB11	C
Chromium	CR	PMS	MS120681	10.0	0.5	0.5	U	0.5	U	0.5	U						
Manganese	MN	PMS	MS120681	15.0	0.5	0.5	U	0.5	U	0.5	U						

Calibration Blanks

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

UNITS:ug/L

ANALYTE	EL	METH	RUN	CRDL	IDL	ICB	C	CCB1	C	CCB2	C	CCB3	C	CCB4	C	CCB5	C
Copper	CU	PMS	MS120711	25.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		
Manganese	MN	PMS	MS120711	15.0	0.5	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U		

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

ICS SOURCE: I.V.

RUNID: IP112671

INSTRUMENT ID: OPTIMA ICP 2

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Aluminum	200000	200000	196858.1	194133.9	**97.1**	199546.5	197449.7	**98.7**			
Antimony		1000	10.9	1007.7	**100.8**	11.3	1030.9	**103.1**			
Arsenic		1000	16.8	990.2	**99.0**	16.9	1007.7	**100.8**			
Barium		1000	-4.6	981.6	**98.2**	-3.8	991.3	**99.1**			
Beryllium		1000	0.1	1001.1	**100.1**	0.1	1024.1	**102.4**			
Boron			-4.9	-6.1		-6.7	-5.8				
Cadmium		1000	-0.3	1001.0	**100.1**	-0.1	1023.4	**102.3**			
Calcium	100000	100000	98481.7	97438.1	**97.4**	99235.0	99361.5	**99.4**			
Chromium		1000	1.0	994.2	**99.4**	0.5	1011.3	**101.1**			
Cobalt		1000	-0.6	967.7	**96.8**	-0.5	984.2	**98.4**			
Copper		1000	-0.6	1008.3	**100.8**	-0.6	1030.9	**103.1**			
Iron	200000	200000	193545.9	191318.1	**95.7**	196742.4	196456.1	**98.2**			
Lead		1000	1.3	942.2	**94.2**	1.0	959.4	**95.9**			
Magnesium	100000	100000	101709.0	96852.1	**96.9**	103217.7	98770.5	**98.8**			
Manganese		1000	1.0	946.0	**94.6**	1.4	969.7	**97.0**			
Molybdenum			1.7	1.8		2.1	2.0				
Nickel		1000	1.3	975.5	**97.6**	0.8	989.3	**98.9**			
Potassium			6.5	-47.9		10.7	-35.0				
Selenium		1000	11.0	966.6	**96.7**	3.5	983.7	**98.4**			
Silicon			0.2	3.6		1.3	2.1				
Silver		1000	-1.0	983.1	**98.3**	-1.0	1001.8	**100.2**			
Sodium			19.2	26.8		14.1	27.6				
Strontium			4.1	4.1		4.2	4.2				
Thallium		1000	-1.5	911.9	**91.2**	-0.3	924.4	**92.4**			
Tin			-8.1	-7.5		-7.3	-6.8				
Titanium			3.5	2.6		3.2	3.0				
Vanadium		1000	3.4	956.5	**95.7**	3.6	973.6	**97.4**			
Zinc		1000	2.5	966.5	**96.7**	3.3	982.4	**98.2**			

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

ICS SOURCE: I.V.

RUNID: MS112781

INSTRUMENT ID: PE ELAN 6000

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.1	0.1							
Arsenic		20	0.1	19.6	**98.0**						
Cadmium		20	0.0	20.3	**101.5**						
Chromium		20	0.5	21.0	**105.0**						
Cobalt		20	0.0	20.6	**103.0**						
Copper		20	0.4	20.4	**102.0**						
Manganese		20	0.1	20.7	**103.5**						
Molybdenum	400	400	413.5	414.2	**103.6**						
Nickel		20	0.5	20.2	**101.0**						
Silver		20	0.0	20.1	**100.5**						
Thorium			0.1	0.1							
Vanadium			0.0	-0.4							
Zinc		20	1.1	21.0	**105.0**						

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

ICS SOURCE: I.V.

PROJECT: City of Kenmore

RUNID: IP112771

SDG: VR80

INSTRUMENT ID: OPTIMA ICP 2

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Aluminum	200000	200000	208789.5	201792.0	**100.9**	195582.1	193989.2	**97.0**	196310.4	194599.3	**97.3**
Antimony		1000	13.1	1029.3	**102.9**	10.2	1001.8	**100.2**	7.4	1003.5	**100.4**
Arsenic		1000	15.1	1013.6	**101.4**	13.9	1022.4	**102.2**	20.2	1024.2	**102.4**
Barium		1000	-3.9	1004.1	**100.4**	-3.4	982.1	**98.2**	-3.6	981.9	**98.2**
Beryllium		1000	0.1	971.9	**97.2**	0.0	985.1	**98.5**	0.0	981.4	**98.1**
Boron			-4.7	-2.9		-5.1	-3.3		-2.6	-4.1	
Cadmium		1000	0.2	1000.0	**100.0**	-0.3	1000.9	**100.1**	-0.3	1001.2	**100.1**
Calcium	100000	100000	105151.8	103470.9	**103.5**	98518.0	98407.1	**98.4**	98161.0	98765.2	**98.8**
Chromium		1000	-0.7	1008.7	**100.9**	0.3	1010.5	**101.1**	-0.1	1006.4	**100.6**
Cobalt		1000	-0.9	968.2	**96.8**	-0.5	940.3	**94.0**	-0.8	968.7	**96.9**
Copper		1000	-0.2	1001.7	**100.2**	-3.9	979.7	**98.0**	-3.7	975.2	**97.5**
Iron	200000	200000	206607.2	202956.4	**101.5**	195551.8	195135.7	**97.6**	194485.6	194792.0	**97.4**
Lead		1000	-0.7	966.0	**96.6**	-4.1	963.8	**96.4**	-2.8	971.1	**97.1**
Magnesium	100000	100000	109030.3	102361.5	**102.4**	101820.0	97376.2	**97.4**	101628.7	97715.1	**97.7**
Manganese		1000	1.5	959.6	**96.0**	1.2	972.2	**97.2**	1.2	969.6	**97.0**
Molybdenum			3.2	2.8		1.8	1.6		2.3	2.2	
Nickel		1000	0.3	952.8	**95.3**	1.2	942.0	**94.2**	0.5	940.6	**94.1**
Potassium			19.1	-48.0		-12.9	-66.9		-8.1	-43.7	
Selenium		1000	4.6	990.3	**99.0**	7.7	976.7	**97.7**	2.4	982.3	**98.2**
Silicon			-0.2	-1.8		-1.4	-4.8		-4.3	-2.3	
Silver		1000	-1.2	1009.0	**100.9**	-1.2	996.7	**99.7**	-1.3	996.1	**99.6**
Sodium			12.0	23.1		13.6	26.3		15.5	26.5	
Strontium			4.1	3.9		3.9	3.9		4.0	3.9	
Thallium		1000	3.3	937.3	**93.7**	5.9	917.2	**91.7**	4.3	924.1	**92.4**
Tin			-8.6	-8.0		-7.6	-8.3		-6.6	-6.6	
Titanium			1.1	0.7		0.4	0.7		1.2	1.1	
Vanadium		1000	3.8	961.6	**96.2**	4.9	934.4	**93.4**	4.4	934.9	**93.5**
Zinc		1000	3.0	954.0	**95.4**	2.7	958.0	**95.8**	1.8	955.2	**95.5**

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

ICS SOURCE: I.V.

PROJECT: City of Kenmore

RUNID: MS112881

SDG: VR80

INSTRUMENT ID: PE ELAN 6000

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Aluminum	20000	20000	20100.2	20458.0	**102.3**						
Calcium	20000	20000	19818.8	19957.3	**99.8**						
Cobalt		20	0.0	20.3	**101.5**						
Iron	20000	20000	20496.9	20939.0	**104.7**						
Magnesium	20000	20000	20161.9	20418.4	**102.1**						
Potassium	20000	20000	20366.7	20832.5	**104.2**						
Sodium	20000	20000	20451.6	21022.7	**105.1**						

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

ICS SOURCE: I.V.

RUNID: MS112981

INSTRUMENT ID: PE ELAN 6000

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.1	0.1							
Arsenic		20	0.1	19.4	**97.0**						
Cadmium		20	0.1	19.4	**97.0**						
Chromium		20	0.4	20.0	**100.0**						
Cobalt		20	0.0	19.8	**99.0**						
Copper		20	0.4	19.6	**98.0**						
Manganese		20	0.0	20.0	**100.0**						
Molybdenum	400	400	391.4	390.3	**97.6**						
Nickel		20	0.4	19.9	**99.5**						
Silver		20	0.0	19.4	**97.0**						
Vanadium			0.0	-0.3							
Zinc		20	1.0	20.4	**102.0**						

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

ICS SOURCE: I.V.

PROJECT: City of Kenmore

RUNID: MS113081

SDG: VR80

INSTRUMENT ID: PE ELAN 6000

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.1	0.1							
Arsenic		20	0.1	19.4	**97.0**						
Cadmium		20	0.1	19.6	**98.0**						
Chromium		20	0.4	20.3	**101.5**						
Cobalt		20	0.0	20.3	**101.5**						
Copper		20	0.5	19.5	**97.5**						
Manganese		20	0.1	20.2	**101.0**						
Molybdenum	400	400	386.1	383.7	**95.9**						
Nickel		20	0.4	19.6	**98.0**						
Silver		20	0.0	19.4	**97.0**						
Vanadium			0.0	-0.3							
Zinc		20	1.0	20.2	**101.0**						

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

ICS SOURCE: I.V.

PROJECT: City of Kenmore

RUNID: MS120481

SDG: VR80

INSTRUMENT ID: PE ELAN 6000

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.1	0.1							
Arsenic		20	0.1	19.3	**96.5**						
Cadmium		20	0.1	19.9	**99.5**						
Chromium		20	0.5	20.3	**101.5**						
Cobalt		20	0.0	20.2	**101.0**						
Copper		20	0.5	20.0	**100.0**						
Manganese		20	0.1	20.1	**100.5**						
Molybdenum	400	400	390.5	395.6	**98.9**						
Nickel		20	0.5	20.7	**103.5**						
Selenium			-0.1	-0.1							
Silver		20	0.0	19.8	**99.0**						
Thorium			0.1	0.1							
Vanadium			0.0	-0.5							
Zinc		20	1.0	20.2	**101.0**						

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

ICS SOURCE: I.V.

RUNID: MS120681

INSTRUMENT ID: PE ELAN 6000

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.1	0.1							
Arsenic		20	0.1	19.5	**97.5**						
Cadmium		20	0.1	19.7	**98.5**						
Chromium		20	0.5	19.6	**98.0**						
Cobalt		20	0.0	19.8	**99.0**						
Copper		20	0.5	19.7	**98.5**						
Manganese		20	0.1	19.6	**98.0**						
Molybdenum	400	400	406.4	402.8	**100.7**						
Nickel		20	0.5	19.7	**98.5**						
Silver		20	0.0	19.8	**99.0**						
Thorium			0.1	0.1							
Vanadium			0.0	-0.5							
Zinc		20	1.2	19.9	**99.5**						

ICP Interference Check Sample

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

ICS SOURCE: I.V.

PROJECT: City of Kenmore

RUNID: MS120711

SDG: VR80

INSTRUMENT ID: NEXION 300D

UNITS: ug/L

ANALYTE	ICSA TV	ICSAB TV	ICSA1	ICSAB1	%R	ICSA2	ICSAB2	%R	ICSA3	ICSAB3	%R
Antimony			0.1	0.1							
Arsenic		20	0.0	19.7	**98.5**						
Cadmium		20	0.2	19.4	**97.0**						
Chromium		20	0.5	19.1	**95.5**						
Cobalt		20	0.0	18.3	**91.5**						
Copper		20	1.1	21.0	**105.0**						
Manganese		20	0.1	19.4	**97.0**						
Molybdenum	400	400	427.2	431.4	**107.9**						
Nickel		20	0.4	21.0	**105.0**						
Selenium			-0.3	-0.3							
Silver		20	0.0	19.0	**95.0**						
Zinc		20	1.0	20.1	**100.5**						

IDLs and ICP Linear Ranges

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80 UNITS: ug/L

ANALYTE	EL	METH	INSTRUMENT	WAVELENTH (nm)	GFA BACK-GROUND	CLP CRDL	RL	RL DATE	ICP LINEAR RANGE (ug/L)	ICP LR DATE
Antimony	SB	PMS	PE ELAN 6000 MS	0.00		60	0.2	4/1/2012		
Arsenic	AS	PMS	PE ELAN 6000 MS	0.00		10	0.2	4/1/2012		
Barium	BA	PMS	PE ELAN 6000 MS	0.00		200	0.5	4/1/2012		
Beryllium	BE	PMS	PE ELAN 6000 MS	0.00		5	0.2	4/1/2012		
Cadmium	CD	PMS	PE ELAN 6000 MS	0.00		5	0.1	4/1/2012		
Calcium	CA	ICP	OPTIMA ICP 2	317.93		5000	50.0	4/1/2012	500000.0	7/30/2012
Chromium	CR	PMS	PE ELAN 6000 MS	0.00		10	0.5	4/1/2012		
Copper	CU	PMS	NEXION 300D MS	0.00		25	0.5	4/1/2012		
Copper	CU	PMS	PE ELAN 6000 MS	0.00		25	0.5	4/1/2012		
Iron	FE	PMS	PE ELAN 6000 MS	0.00		100	20.0	4/1/2012		
Lead	PB	PMS	PE ELAN 6000 MS	0.00		3	0.1	4/1/2012		
Magnesium	MG	ICP	OPTIMA ICP 2	279.08		5000	50.0	4/1/2012	500000.0	7/30/2012
Manganese	MN	PMS	NEXION 300D MS	0.00		15	0.5	4/1/2012		
Manganese	MN	PMS	PE ELAN 6000 MS	0.00		15	0.5	4/1/2012		
Mercury	HG	CVA	CETAC MERCURY	253.70		0.2	0.1	4/1/2012		
Nickel	NI	PMS	PE ELAN 6000 MS	0.00		40	0.5	4/1/2012		
Selenium	SE	PMS	PE ELAN 6000 MS	0.00		5	0.5	4/1/2012		
Silver	AG	PMS	PE ELAN 6000 MS	0.00		10	0.2	4/1/2012		
Thallium	TL	PMS	PE ELAN 6000 MS	0.00		10	0.2	4/1/2012		
Zinc	ZN	PMS	PE ELAN 6000 MS	0.00		20	4.0	4/1/2012		

ICP Interelement Correction Factors

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

IEC DATE: 11/12/2012

SDG: VR80

INSTRUMENT ID: OPTIMA ICP 2

ANALYTE	WAVELENGTH	AL	AS	BA	BE	CA	CD	CO	CR	CU	FE
Aluminum	308.22	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	9.1050360	0.0000000	0.0000000
Arsenic	188.98	0.0000000	0.0000000	0.0000000	0.0000000	0.0581760	0.0000000	-0.8953680	1.5607750	0.0000000	0.0000000
Barium	233.53	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.1763230	0.0000000	0.0000000	0.1637240
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Cadmium	228.80	0.0000000	6.5458340	0.0000000	0.0000000	0.0000000	0.0000000	0.1152580	0.0000000	0.0000000	0.0095100
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0000000	0.0000000	0.0295099	0.0000000	0.0091790	0.0000000	-0.0348880	0.0000000	0.0000000	-0.0392710
Cobalt	228.62	0.0000000	0.0000000	0.0788170	0.0000000	0.0000000	0.0000000	0.0000000	-0.0346500	0.0000000	0.0130090
Copper	324.75	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.1608400	0.0000000	0.0000000	-0.0442360
Iron	273.96	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-1.4437390	0.0000000	0.0000000
Lead	220.35	-0.2393490	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.1467250	-1.7804540	1.4264890	0.0412430
Magnesium	279.08	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-1.4396410	-1.1694080	0.0000000	0.5321920
Manganese	257.61	0.0046450	0.0000000	0.0000000	0.0000000	0.0019080	0.0000000	0.0000000	0.0000000	0.0000000	-0.0054280
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0108090	0.0000000	0.0000000	0.0540880	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.4883700	0.0000000	0.0000000	0.0000000
Silicon	288.16	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-3.5902270	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	5.5577350	0.3891400	0.0000000	-0.1069480
Tin	189.93	0.0000000	0.0000000	0.0000000	0.0000000	-0.1236770	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	0.0000000	0.0000000	0.0477260	0.0000000	0.0000000	0.1988470	0.0000000	0.0000000
Vanadium	292.40	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-4.2880510	0.0000000	0.0349450
Zinc	206.20	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0645950	0.0000000	0.0000000

ICP Interelement Correction Factors

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

IEC DATE: 11/12/2012

SDG: VR80

INSTRUMENT ID: OPTIMA ICP 2

ANALYTE	WAVELENGTH	MG	MN	MO	NI	PB	SB	TI	TL	V	ZN
Aluminum	308.22	0.0000000	0.0000000	17.2648390	0.0000000	0.0000000	0.0000000	2.1534780	0.0000000	14.6676620	0.0000000
Antimony	206.84	0.0000000	0.0000000	0.0000000	-0.3171320	0.0000000	0.0000000	-1.6488050	0.0000000	-2.7828430	0.0000000
Arsenic	188.98	0.0000000	0.0000000	3.5824010	0.0000000	0.0000000	0.0000000	-28.6279570	0.0000000	0.0000000	0.0000000
Barium	233.53	0.0000000	0.0000000	0.0000000	0.1006020	0.0000000	0.0000000	0.0000000	0.0000000	0.2160840	0.0000000
Beryllium	313.04	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0120420	0.0000000	0.1997240	0.0000000
Cadmium	228.80	0.0000000	0.0000000	0.0000000	-0.9709640	0.0000000	0.0000000	0.0000000	0.0000000	0.6837900	0.0000000
Calcium	317.93	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Chromium	267.72	0.0863140	0.0880780	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.3314250	0.0362000
Cobalt	228.62	0.0000000	0.0000000	-0.1203920	0.1624660	0.0000000	0.0000000	1.9337740	0.0000000	0.0000000	0.0000000
Copper	324.75	0.0084630	0.0000000	0.4010840	0.0000000	0.0000000	0.0000000	0.2064430	0.0000000	0.0000000	0.0000000
Iron	273.96	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	8.4794020	0.0000000
Lead	220.35	0.0000000	0.0000000	-0.4099510	-0.1101090	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Magnesium	279.08	0.0000000	0.0000000	-5.5537550	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Manganese	257.61	0.0000000	0.0000000	0.0000000	0.0000000	-0.2086980	0.0000000	0.0000000	0.0000000	-0.0242310	0.0000000
Molybdenum	202.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Nickel	231.60	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.5468870	0.0000000	0.4309940	0.0000000	0.0000000
Potassium	766.49	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Selenium	196.03	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.5703720	0.0000000
Silicon	288.16	-0.1197150	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Silver	328.07	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	-0.0400098	0.0000000	-2.8848200	0.0000000
Sodium	589.59	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Thallium	190.80	0.0000000	-0.8464030	-0.9915990	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	3.4340400	0.0000000
Tin	189.93	0.0000000	0.0000000	0.8648230	0.0000000	-0.0322750	-0.4551870	-0.1436590	0.0000000	0.0000000	0.0000000
Titanium	334.90	0.0000000	0.0000000	0.8648230	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000
Vanadium	292.40	0.0000000	-0.1521530	0.5765370	0.0000000	0.0000000	0.0000000	0.5629710	0.0000000	0.0000000	0.0000000
Zinc	206.20	0.0000000	0.0000000	0.2677330	0.0000000	-0.0519400	0.0000000	0.0000000	0.0000000	0.0000000	0.0000000

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

ANALYSIS METHOD: ICP

ARI PREP CODE: TWC

PREPDATE: 11/13/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
HT-01-W-C-121107	VR80A	0.000	50.0	50.0
HT-01-W-C-121107D	VR80ADUP	0.000	50.0	50.0
HT-01-W-C-121107S	VR80ASPK	0.000	50.0	50.0
HT-04-W-C-121107	VR80B	0.000	50.0	50.0
HT-04-W-C-dup-1211	VR80C	0.000	50.0	50.0
WS-10-W-C-121107	VR80D	0.000	50.0	50.0
PBW	VR80MB1	0.000	50.0	50.0
LCSW	VR80MB1SPK	0.000	50.0	50.0

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 11/13/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
HT-01-W-C-121107	VR80A	0.000	50.0	25.0
HT-01-W-C-121107D	VR80ADUP	0.000	50.0	25.0
HT-01-W-C-121107S	VR80ASPK	0.000	50.0	25.0
HT-04-W-C-121107	VR80B	0.000	50.0	25.0
HT-04-W-C-dup-1211	VR80C	0.000	50.0	25.0
WS-10-W-C-121107	VR80D	0.000	50.0	25.0
HT-01-W-C-121107	VR80E	0.000	50.0	25.0
HT-01-W-C-121107D	VR80EDUP	0.000	50.0	25.0
HT-01-W-C-121107S	VR80ESPK	0.000	50.0	25.0
HT-04-W-C-121107	VR80F	0.000	50.0	25.0
HT-04-W-C-dup-1211	VR80G	0.000	50.0	25.0
WS-10-W-C-121107	VR80H	0.000	50.0	25.0
PBW	VR80MB1	0.000	50.0	25.0
LCSW	VR80MB1SPK	0.000	50.0	25.0
PBW	VR80MB2	0.000	50.0	25.0
LCSW	VR80MB2SPK	0.000	50.0	25.0

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

ANALYSIS METHOD: PMS

ARI PREP CODE: REN

PREPDATE: 12/6/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
HT-01-W-C-121107	VR80RA	0.000	40.0	20.0
HT-01-W-C-121107D	VR80RADUP	0.000	40.0	20.0
HT-01-W-C-121107S	VR80RASPK	0.000	40.0	20.0
HT-04-W-C-121107	VR80RB	0.000	50.0	25.0
HT-04-W-C-dup-1211	VR80RC	0.000	50.0	25.0
WS-10-W-C-121107	VR80RD	0.000	50.0	25.0
HT-01-W-C-121107	VR80RE	0.000	40.0	20.0
HT-01-W-C-121107D	VR80REDUP	0.000	40.0	20.0
HT-01-W-C-121107S	VR80RESPK	0.000	40.0	20.0
HT-04-W-C-121107	VR80RF	0.000	50.0	25.0
HT-04-W-C-dup-1211	VR80RG	0.000	50.0	25.0
WS-10-W-C-121107	VR80RH	0.000	50.0	25.0
PBW	VR80RMB1	0.000	50.0	25.0
LCSW	VR80RMB1SPK	0.000	50.0	25.0
PBW	VR80RMB2	0.000	50.0	25.0
LCSW	VR80RMB2SPK	0.000	50.0	25.0

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

ANALYSIS METHOD: CVA

ARI PREP CODE: DMM

PREPDATE: 11/12/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
HT-01-W-C-121107	VR80E	0.000	20.0	20.0
HT-01-W-C-121107D	VR80EDUP	0.000	20.0	20.0
HT-01-W-C-121107S	VR80ESPK	0.000	20.0	20.0
HT-04-W-C-121107	VR80F	0.000	20.0	20.0
HT-04-W-C-dup-1211	VR80G	0.000	20.0	20.0
WS-10-W-C-121107	VR80H	0.000	20.0	20.0
PBW	VR80MB2	0.000	20.0	20.0
LCSW	VR80MB2SPK	0.000	20.0	20.0

Preparation Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore

SDG: VR80

ANALYSIS METHOD: CVA

ARI PREP CODE: TWM

PREPDATE: 11/12/2012

CLIENT ID	ARI ID	MASS (g)	INITIAL VOLUME (mL)	FINAL VOLUME (mL)
HT-01-W-C-121107	VR80A	0.000	20.0	20.0
HT-01-W-C-121107D	VR80ADUP	0.000	20.0	20.0
HT-01-W-C-121107S	VR80ASPK	0.000	20.0	20.0
HT-04-W-C-121107	VR80B	0.000	20.0	20.0
HT-04-W-C-dup-1211	VR80C	0.000	20.0	20.0
WS-10-W-C-121107	VR80D	0.000	20.0	20.0
PBW	VR80MB1	0.000	20.0	20.0
LCSW	VR80MB1SPK	0.000	20.0	20.0

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: OPTIMA ICP 2 | START DATE: 11/26/2012

SDG: VR80 | RUNID: IP112671 | METHOD: ICP | END DATE: 11/26/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	11143								X								X														
S2	S2	1.00	11184																														
S3	S3	1.00	11203																														
S4	S4	1.00	11225																														
S5	S5	1.00	11250								X								X														
S0	S0	1.00	11410								X								X														
S2	S2	1.00	11445																														
S2	S2	1.00	12351																														
ZZZZZZ	ZZZZZZ	1.00	12385																														
S4	S4	1.00	12485																														
S5	S5	1.00	12505								X								X														
ICV	ICV	1.00	12530								X								X														
ICB	ICB	1.00	12571								X								X														
CRI	CRII	1.00	13012								X								X														
ICSA	ICSAI	1.00	13054								X								X														
ICSAB	ICSABI	1.00	13095								X								X														
ZZZZZZ	HiPurQC7M	1.00	13150																														
ZZZZZZ	SPEXQC21	1.00	13192																														
ZZZZZZ	DICHECK	1.00	13233																														
CCV	CCV1	1.00	13275								X								X														
CCB	CCB1	1.00	13315								X								X														
ZZZZZZ	VS21MB1	2.00	13361																														
ZZZZZZ	VS20E	5.00	13402																														
ZZZZZZ	VS21B	5.00	13442																														
ZZZZZZ	VS21C	5.00	13482																														
ZZZZZZ	VS21A-L	25.00	13522																														
ZZZZZZ	VS21A	5.00	13562																														
ZZZZZZ	VS21ADUP	5.00	14002																														
ZZZZZZ	VS21ASPK	5.00	14042																														
ZZZZZZ	ZZZZZZ	5.00	14081																														
ZZZZZZ	VS21MB1SPK	2.00	14112																														
CCV	CCV2	1.00	14152								X								X														
CCB	CCB2	1.00	14193								X								X														
ZZZZZZ	VS21D	5.00	14234																														
ZZZZZZ	VS21E	5.00	14274																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: OPTIMA ICP 2 | START DATE: 11/26/2012

SDG: VR80 | RUNID: IP112671 | METHOD: ICP | END DATE: 11/26/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	VS21F	5.00	14314																														
ZZZZZZ	VS21G	5.00	14354																														
ZZZZZZ	VS21H	5.00	14394																														
ZZZZZZ	VS21I	5.00	14434																														
ZZZZZZ	VS21J	5.00	14474																														
ZZZZZZ	VS21K	5.00	14514																														
ZZZZZZ	VS21L	5.00	14554																														
CCV	CCV3	1.00	14594								X								X													
CCB	CCB3	1.00	15035								X								X													
CCB	CCB4	1.00	15084								X								X													
CRI	CRIF	1.00	15125								X								X													
ICSA	ICSAF	1.00	15171								X								X													
ICSAB	ICSABF	1.00	15213								X								X													
CCV	CCV4	1.00	15251								X								X													
CCB	CCB5	1.00	15292								X								X													
ZZZZZZ	VS36MB	1.00	15333																														
ZZZZZZ	VS36B	1.00	15375																														
ZZZZZZ	VS36C	1.00	15420																														
ZZZZZZ	VS36D	1.00	15460																														
ZZZZZZ	VS36E	1.00	15502																														
ZZZZZZ	VS36F	1.00	15543																														
ZZZZZZ	VS36ADUP	1.00	15585																														
ZZZZZZ	VS36A	1.00	16030																														
ZZZZZZ	VS36ASPK	1.00	16071																														
ZZZZZZ	VS36MBSPK	1.00	16111																														
CCV	CCV5	1.00	16151								X								X													
CCB	CCB6	1.00	16192								X								X													
ZZZZZZ	VS36G	1.00	16233																														
ZZZZZZ	VS36H	1.00	16275																														
ZZZZZZ	VS36I	1.00	16320																														
CCV	CCV6	1.00	16362								X								X													
CCB	CCB7	1.00	16402								X								X													
PBW	VR80MB1	1.00	16443								X								X													
HT-04-W-C-121107	VR80B	1.00	16485								X								X													
HT-04-W-C-dup-1211	VR80C	1.00	16530																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: OPTIMA ICP 2 | START DATE: 11/26/2012

SDG: VR80 | RUNID: IP112671 | METHOD: ICP | END DATE: 11/26/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
WS-10-W-C-121107	VR80D	1.00	16571								X								X														
HT-01-W-C-121107D	VR80ADUP	1.00	17013								X								X														
HT-01-W-C-121107	VR80A	1.00	17054								X								X														
HT-01-W-C-121107S	VR80ASPK	1.00	17100								X								X														
ZZZZZZ	ZZZZZZ	1.00	17140																														
LCSW	VR80MB1SPK	1.00	17180								X								X														
CCV	CCV7	1.00	17220								X								X														
CCB	CCB8	1.00	17260								X								X														

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: OPTIMA ICP 2 | START DATE: 11/27/2012

SDG: VR80 | RUNID: IP112771 | METHOD: ICP | END DATE: 11/27/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10210								X								X														
S2	S2	1.00	10251																														
S3	S3	1.00	10270																														
S4	S4	1.00	10291																														
S5	S5	1.00	10313								X								X														
ICV	ICV	1.00	10343								X								X														
ICB	ICB	1.00	10383								X								X														
CRI	CRII	1.00	10425								X								X														
ICSA	ICSAI	1.00	10471								X								X														
ICSAB	ICSABI	1.00	10512								X								X														
CCV	CCV1	1.00	10561								X								X														
CCB	CCB1	1.00	11012								X								X														
ZZZZZZ	VR58MB1	2.00	11081																														
ZZZZZZ	VR58B	2.00	11123																														
ZZZZZZ	VR58C	2.00	11163																														
ZZZZZZ	VR58D	2.00	11202																														
ZZZZZZ	VR58E	2.00	11242																														
ZZZZZZ	VR58ADUP	2.00	11282																														
ZZZZZZ	VR58A	2.00	11322																														
ZZZZZZ	VR58ASPK	2.00	11362																														
ZZZZZZ	VR58APOST	2.00	11392																														
ZZZZZZ	VR58MB1SPK	2.00	11422																														
CCV	CCV2	1.00	11462								X								X														
CCB	CCB2	1.00	11513								X								X														
ZZZZZZ	VR58F	2.00	11554																														
ZZZZZZ	VR58G	2.00	11594																														
ZZZZZZ	VR58H	2.00	12034																														
ZZZZZZ	VR58I	2.00	12074																														
ZZZZZZ	VR58J	2.00	12114																														
ZZZZZZ	VR82A	2.00	12154																														
ZZZZZZ	VR82B	2.00	12194																														
ZZZZZZ	VR82C	2.00	12234																														
ZZZZZZ	VR82D	2.00	12272																														
ZZZZZZ	VR82E	2.00	12312																														
CCV	CCV3	1.00	12352								X								X														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: OPTIMA ICP 2 | START DATE: 11/27/2012

SDG: VR80 | RUNID: IP112771 | METHOD: ICP | END DATE: 11/27/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
CCB	CCB3	1.00	12402								X								X														
ZZZZZZ	VR82F	2.00	12444																														
ZZZZZZ	VR82G	2.00	12484																														
ZZZZZZ	VR82H	2.00	12524																														
ZZZZZZ	VR82I	2.00	12564																														
CCV	CCV4	1.00	13003								X								X														
CCV	CCV5	1.00	13070								X								X														
CCB	CCB4	1.00	13121								X								X														
S4	S4	1.00	13224																														
S5	S5	1.00	13250								X								X														
CCV	CCV6	1.00	13290								X								X														
CCB	CCB5	1.00	13335								X								X														
ZZZZZZ	VS22MB1	2.00	13382																														
ZZZZZZ	VS22B	5.00	13424																														
ZZZZZZ	VS22C	5.00	13464																														
ZZZZZZ	VS22D	5.00	13503																														
ZZZZZZ	ZZZZZZ	25.00	13544																														
ZZZZZZ	VS22A	5.00	13583																														
ZZZZZZ	VS22ADUP	5.00	14023																														
ZZZZZZ	VS22ASPK	5.00	14063																														
ZZZZZZ	ZZZZZZ	5.00	14103																														
ZZZZZZ	VS22MB1SPK	2.00	14142																														
CCV	CCV7	1.00	14182								X								X														
CCV	CCV8	1.00	14270								X								X														
CCV	CCV9	1.00	14375								X								X														
CCB	CCB6	1.00	14425								X								X														
ZZZZZZ	VS22E	5.00	14470																														
ZZZZZZ	VS22F	5.00	14510																														
ZZZZZZ	VS22G	5.00	14550																														
ZZZZZZ	VS22H	5.00	14590																														
ZZZZZZ	VS22I	5.00	15030																														
ZZZZZZ	VS22J	5.00	15070																														
ZZZZZZ	VS22K	5.00	15110																														
ZZZZZZ	VS22L	5.00	15150																														
CCV	CCV10	1.00	15191								X								X														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: OPTIMA ICP 2 | START DATE: 11/27/2012

SDG: VR80 | RUNID: IP112771 | METHOD: ICP | END DATE: 11/27/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
CCB	CCB7	1.00	15233								X								X														
CRI	CRIF	1.00	15275								X								X														
ICSA	ICSAF	1.00	15320								X								X														
ICSAB	ICSABF	1.00	15362								X								X														
CCV	CCV11	1.00	15401								X								X														
CCB	CCB8	1.00	15451								X								X														
ZZZZZZ	VS22MB1	2.00	15493																														
ZZZZZZ	VS22B	5.00	15534																														
ZZZZZZ	VS22C	5.00	15574																														
ZZZZZZ	VS22D	5.00	16014																														
ZZZZZZ	VS22A-L	25.00	16054																														
ZZZZZZ	VS22A	5.00	16094																														
ZZZZZZ	VS22ADUP	5.00	16134																														
ZZZZZZ	VS22ASPK	5.00	16174																														
ZZZZZZ	VS22APOST	5.00	16214																														
ZZZZZZ	VS22MB1SPK	2.00	16252																														
CCV	CCV12	1.00	16292								X								X														
CCB	CCB9	1.00	16343								X								X														
CRI	CRIF1	1.00	16384								X								X														
ICSA	ICSAF1	1.00	16425								X								X														
ICSAB	ICSABF1	1.00	16471								X								X														
CCV	CCV13	1.00	16510								X								X														
CCB	CCB10	1.00	16560								X								X														
HT-04-W-C-dup-1211	VR80C	1.00	17002								X								X														
ZZZZZZ	VR82F	2.00	17043																														
ZZZZZZ	VR82G	2.00	17083																														
ZZZZZZ	VR82H	2.00	17123																														
ZZZZZZ	VR82I	2.00	17163																														
CCV	CCV14	1.00	17203								X								X														
CCB	CCB11	1.00	17254								X								X														

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 11/27/2012

SDG: VR80 | RUNID: MS112781 METHOD: PMS | END DATE: 11/27/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10110		X		X		X	X		X		X	X					X			X	X	X	X				X			X
S1	S1	1.00	10170		X		X		X	X		X		X	X					X			X	X	X	X				X			X
S2	S2	1.00	10230		X		X		X	X		X		X	X					X			X	X	X	X				X			X
S3	S3	1.00	10290		X		X		X	X		X		X	X					X			X	X	X	X				X			X
S4	S4	1.00	10360		X		X		X	X		X		X	X					X			X	X	X	X				X			X
ZZZZZZ	Rinse Sampl	1.00	10420																														
ICV	MICV	1.00	10500		X		X		X	X		X		X	X					X			X	X	X	X				X			X
ICB	ICB	1.00	10560		X		X		X	X		X		X	X					X			X	X	X	X				X			X
CCV	MCCV1	1.00	11020		X		X		X	X		X		X	X					X			X	X	X	X				X			X
CCB	CCB1	1.00	11090		X		X		X	X		X		X	X					X			X	X	X	X				X			X
CRI	MCRI	1.00	11150		X		X		X	X		X		X	X					X			X	X	X	X				X			X
ICSA	ICSAI	1.00	11200		X		X		X	X		X		X	X					X			X	X	X	X				X			X
ICSAB	ICSABI	1.00	11270		X		X		X	X		X		X	X					X			X	X	X	X				X			X
ZZZZZZ	LR200	1.00	11330																														
ZZZZZZ	LR300	1.00	11400																														
CCV	MCCV2	1.00	11460		X		X		X	X		X		X	X					X			X	X	X	X				X			X
CCB	CCB2	1.00	11530		X		X		X	X		X		X	X					X			X	X	X	X				X			X
ZZZZZZ	VS14MB1	2.00	12040																														
ZZZZZZ	VS14MB2	2.00	12100																														
ZZZZZZ	VS14MB1SPK	2.00	12160																														
ZZZZZZ	VS14MB2SPK	2.00	12230																														
ZZZZZZ	VR65B	20.00	12290																														
ZZZZZZ	VT20A	20.00	12350																														
ZZZZZZ	VS14ADUP	2.00	12420																														
ZZZZZZ	VS14A	2.00	12480																														
ZZZZZZ	VS14ASPK	2.00	12540																														
ZZZZZZ	VS14B	2.00	13010																														
CCV	MCCV3	1.00	13070		X		X		X	X		X		X	X					X			X	X	X	X				X			X
CCB	CCB3	1.00	13130		X		X		X	X		X		X	X					X			X	X	X	X				X			X
ZZZZZZ	VS14C	2.00	13460																														
ZZZZZZ	VS14D	2.00	13520																														
ZZZZZZ	VS36C	2.00	13590																														
ZZZZZZ	VR63N	10.00	14050																														
ZZZZZZ	VR63N	2.00	14110																														
ZZZZZZ	VQ39A	5.00	14180																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 11/27/2012

SDG: VR80 | RUNID: MS112781 METHOD: PMS | END DATE: 11/27/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	VR63ADUP	10.00	14240																														
ZZZZZZ	VR63A	10.00	14300																														
ZZZZZZ	VR63ASPK	10.00	14370																														
ZZZZZZ	VR63O	1.00	14430																														
CCV	MCCV4	1.00	14490		X		X		X	X		X		X	X					X			X	X	X	X				X			X
CCB	CCB4	1.00	14560		X		X		X	X		X		X	X					X			X	X	X	X				X			X
S0	S0	1.00	15020		X		X		X	X		X		X	X					X			X	X	X	X				X			X
CCV	MCCV5	1.00	15090		X		X		X	X		X		X	X					X			X	X	X	X				X			X
CCB	CCB5	1.00	15160		X		X		X	X		X		X	X					X			X	X	X	X				X			X
ZZZZZZ	VR63MDUP	1.00	15210																														
ZZZZZZ	VR63M	1.00	15280																														
ZZZZZZ	VR63MSPK	1.00	15340																														
ZZZZZZ	VR63P	1.00	15400																														
ZZZZZZ	VR63Q	1.00	15470																														
ZZZZZZ	VR63R	1.00	15530																														
ZZZZZZ	VR63S	1.00	15590																														
ZZZZZZ	VR63T	1.00	16050																														
ZZZZZZ	VR63U	1.00	16120																														
ZZZZZZ	VR63V	1.00	16200																														
CCV	MCCV6	1.00	16270		X		X		X	X		X		X	X					X			X	X	X	X				X			X
CCB	CCB6	1.00	16330		X		X		X	X		X		X	X					X			X	X	X	X				X			X
ZZZZZZ	VR63W	1.00	16390																														
ZZZZZZ	VR63X	1.00	16450																														
ZZZZZZ	VS14E	2.00	16520																														
ZZZZZZ	VS14FDUP	2.00	16580																														
ZZZZZZ	VS14F	2.00	17040																														
ZZZZZZ	VS14FSPK	2.00	17110																														
ZZZZZZ	VS14G	5.00	17170																														
ZZZZZZ	VS14H	5.00	17230																														
ZZZZZZ	VS14I	2.00	17290																														
ZZZZZZ	VS14J	2.00	17360																														
CCV	MCCV7	1.00	17420		X		X		X	X		X		X	X					X			X	X	X	X				X			X
CCB	CCB7	1.00	17490		X		X		X	X		X		X	X					X			X	X	X	X				X			X
ZZZZZZ	VS44MB	2.00	17540																														
PBW	VR80MB1	2.00	18010		X		X		X	X		X		X						X			X	X	X	X				X			X

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 11/27/2012

SDG: VR80 | RUNID: MS112781 METHOD: PMS | END DATE: 11/27/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
PBW	VR80MB2	2.00	18070		X		X		X	X		X		X	X					X			X	X	X	X				X			X
ZZZZZZ	VS55MB1	2.00	18130																														
ZZZZZZ	VS44MBSPK	2.00	18200																														
LCSW	VR80MB1SPK	2.00	18260		X		X		X	X		X		X						X			X	X	X	X				X			X
LCSW	VR80MB2SPK	2.00	18320		X		X		X			X		X	X								X	X	X	X				X			X
ZZZZZZ	VQ37R	1.00	18390																														
ZZZZZZ	VS44A	2.00	18450																														
ZZZZZZ	VS44B	2.00	18510																														
CCV	MCCV8	1.00	18570		X		X		X	X		X		X	X					X			X	X	X	X				X			X
CCB	CCB8	1.00	19040		X		X		X	X		X		X	X					X			X	X	X	X				X			X

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 11/28/2012

SDG: VR80 | RUNID: MS112881 METHOD: PMS | END DATE: 11/28/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10140													X																	
S1	S1	1.00	10190													X																	
S2	S2	1.00	10240													X																	
S3	S3	1.00	10290													X																	
S4	S4	1.00	10350													X																	
ZZZZZZ	Rinse Sampl	1.00	10390																														
ICV	MICV	1.00	10470													X																	
ICV	MICV	1.00	10540													X																	
ICV	MICV	1.00	10580													X																	
ICB	ICB	1.00	11020													X																	
CCV	MCCV1	1.00	11060													X																	
CCB	CCB1	1.00	11100													X																	
CRI	MCRI	1.00	11130													X																	
ICSA	ICSAI	1.00	11170													X																	
ICSAB	ICSABI	1.00	11210													X																	
CCV	MCCV2	1.00	11250													X																	
CCB	CCB2	1.00	11290													X																	
ZZZZZZ	VT84MB1	2.00	11430																														
ZZZZZZ	VT84MB2	2.00	11470																														
PBW	VR80MB1	2.00	11510													X																	
PBW	VR80MB2	2.00	11550													X																	
LCSW	VR80MB1SPK	2.00	11590													X																	
LCSW	VR80MB2SPK	2.00	12030													X																	
ZZZZZZ	VT84MB1SPK	2.00	12060																														
ZZZZZZ	VT84MB2SPK	2.00	12100																														
ZZZZZZ	VT84A	2.00	12140																														
ZZZZZZ	VT84B	2.00	12180																														
CCV	MCCV3	1.00	12220													X																	
CCB	CCB3	1.00	12260													X																	
HT-01-W-C-121107D	VR80ADUP	2.00	12410													X																	
HT-01-W-C-121107	VR80A	2.00	12450													X																	
HT-01-W-C-121107S	VR80ASPK	2.00	12490													X																	
HT-04-W-C-121107	VR80B	2.00	12530													X																	
HT-04-W-C-dup-1211	VR80C	2.00	12570													X																	
WS-10-W-C-121107	VR80D	2.00	13010													X																	

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 11/28/2012

SDG: VR80 | RUNID: MS112881 METHOD: PMS | END DATE: 11/28/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
HT-01-W-C-121107D	VR80EDUP	2.00	13050													X																	
HT-01-W-C-121107	VR80E	2.00	13090													X																	
HT-01-W-C-121107S	VR80ESPK	2.00	13120													X																	
HT-04-W-C-121107	VR80F	2.00	13160													X																	
CCV	MCCV4	1.00	13200													X																	
CCB	CCB4	1.00	13240													X																	
HT-04-W-C-dup-1211	VR80G	2.00	13450													X																	
WS-10-W-C-121107	VR80H	2.00	13490													X																	
CCV	MCCV5	1.00	13530													X																	
CCB	CCB5	1.00	13570													X																	

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 11/29/2012

SDG: VR80 | RUNID: MS112981 METHOD: PMS | END DATE: 11/29/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	11250		X		X		X	X		X			X								X	X	X	X				X			X
S1	S1	1.00	11310		X		X		X	X		X			X								X	X	X	X				X			X
S2	S2	1.00	11370		X		X		X	X		X			X								X	X	X	X				X			X
S3	S3	1.00	11430		X		X		X	X		X			X								X	X	X	X				X			X
S4	S4	1.00	11490		X		X		X	X		X			X								X	X	X	X				X			X
ZZZZZZ	Rinse Sampl	1.00	11560																														
ICV	MICV	1.00	12110		X		X		X	X		X			X								X	X	X	X				X			X
ICB	ICB	1.00	12180		X		X		X	X		X			X								X	X	X	X				X			X
CCV	MCCV1	1.00	12240		X		X		X	X		X			X								X	X	X	X				X			X
CCB	CCB1	1.00	12300		X		X		X	X		X			X								X	X	X	X				X			X
CRI	MCRI	1.00	12360		X		X		X	X		X			X								X	X	X	X				X			X
ICSA	ICSAI	1.00	12420		X		X		X	X		X			X								X	X	X	X				X			X
ICSAB	ICSABI	1.00	12480		X		X		X	X		X			X								X	X	X	X				X			X
ZZZZZZ	LR200	1.00	12550																														
ZZZZZZ	LR300	1.00	13010																														
CCV	MCCV2	1.00	13080		X		X		X	X		X			X								X	X	X	X				X			X
CCB	CCB2	1.00	13150		X		X		X	X		X			X								X	X	X	X				X			X
ZZZZZZ	VS66MB1	2.00	13200																														
ZZZZZZ	VS66MB2	2.00	13270																														
ZZZZZZ	VS66MB3	2.00	13330																														
ZZZZZZ	VS66MB1SPK	2.00	13390																														
ZZZZZZ	VS66MB2SPK	2.00	13450																														
ZZZZZZ	VS66MB3SPK	2.00	13520																														
ZZZZZZ	VR63Q	2.00	13580																														
ZZZZZZ	VS55A	10.00	14040																														
ZZZZZZ	VS64A	20.00	14110																														
ZZZZZZ	VS66A	2.00	14170																														
CCV	MCCV3	1.00	14230		X		X		X	X		X			X								X	X	X	X				X			X
CCB	CCB3	1.00	14300		X		X		X	X		X			X								X	X	X	X				X			X
ZZZZZZ	VS66MB4	2.00	14380																														
ZZZZZZ	VS66MB4SPK	2.00	14440																														
ZZZZZZ	VS14ADUP	10.00	14500																														
ZZZZZZ	VS14A	10.00	14560																														
ZZZZZZ	VS14ASPK	10.00	15030																														
ZZZZZZ	VS14B	10.00	15090																														

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 11/29/2012

SDG: VR80 | RUNID: MS112981 METHOD: PMS | END DATE: 11/29/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	VS14C	10.00	15150																														
ZZZZZZ	VS14D	10.00	15220																														
ZZZZZZ	VS14H	10.00	15280																														
ZZZZZZ	VS66B	2.00	15340																														
CCV	MCCV4	1.00	15410		X		X		X	X		X			X								X	X	X	X				X			X
CCB	CCB4	1.00	15470		X		X		X	X		X			X								X	X	X	X				X			X
ZZZZZZ	VR63O	2.00	16070																														
ZZZZZZ	VR63T	10.00	16130																														
ZZZZZZ	VR63W	10.00	16190																														
ZZZZZZ	VS36C	2.00	16280																														
LCSW	VR80MB2SPK	2.00	16350																														
ZZZZZZ	VS44A	20.00	16410																														
HT-01-W-C-121107D	VR80ADUP	2.00	16470																														
HT-01-W-C-121107	VR80A	2.00	16530																														
HT-01-W-C-121107S	VR80ASPK	2.00	17000																														
HT-04-W-C-121107	VR80B	2.00	17060																														
CCV	MCCV5	1.00	17120		X		X		X	X		X			X								X	X	X	X				X			X
CCB	CCB5	1.00	17190		X		X		X	X		X			X								X	X	X	X				X			X
HT-04-W-C-dup-1211	VR80C	2.00	17250		X		X		X	X		X											X	X	X	X				X			X
WS-10-W-C-121107	VR80D	2.00	17310		X		X		X	X		X											X	X	X	X				X			X
HT-01-W-C-121107D	VR80EDUP	2.00	17380		X		X		X	X		X			X								X	X	X	X				X			X
HT-01-W-C-121107	VR80E	2.00	17440		X		X		X	X		X			X								X	X	X	X				X			X
HT-01-W-C-121107S	VR80ESPK	2.00	17500		X		X		X	X		X			X								X	X	X	X				X			X
HT-04-W-C-121107	VR80F	2.00	17560		X		X		X	X		X			X								X	X	X	X				X			X
HT-04-W-C-dup-1211	VR80G	2.00	18030		X		X		X	X		X			X								X	X	X	X				X			X
WS-10-W-C-121107	VR80H	2.00	18090		X		X		X	X		X			X								X	X	X	X				X			X
ZZZZZZ	VS14J	2.00	18150																														
ZZZZZZ	VR65B	20.00	18210																														
CCV	MCCV6	1.00	18280		X		X		X	X		X			X								X	X	X	X				X			X
CCB	CCB6	1.00	18340		X		X		X	X		X			X								X	X	X	X				X			X

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 11/30/2012

SDG: VR80 | RUNID: MS113081 METHOD: PMS | END DATE: 11/30/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	10230		X		X		X			X		X						X				X	X	X				X			X
S1	S1	1.00	10290		X		X		X			X		X						X				X	X	X				X			X
S2	S2	1.00	10350		X		X		X			X		X						X				X	X	X				X			X
S3	S3	1.00	10420		X		X		X			X		X						X				X	X	X				X			X
S4	S4	1.00	10480		X		X		X			X		X						X				X	X	X				X			X
ZZZZZZ	Rinse Sampl	1.00	10540																														
ICV	MICV	1.00	11020		X		X		X			X		X						X				X	X	X				X			X
ICB	ICB	1.00	11080		X		X		X			X		X						X				X	X	X				X			X
CCV	MCCV1	1.00	11140		X		X		X			X		X						X				X	X	X				X			X
CCB	CCB1	1.00	11210		X		X		X			X		X						X				X	X	X				X			X
CRI	MCRI	1.00	11310		X		X		X			X		X						X				X	X	X				X			X
ICSA	ICSAI	1.00	11360		X		X		X			X		X						X				X	X	X				X			X
ICSAB	ICSABI	1.00	11430		X		X		X			X		X						X				X	X	X				X			X
ZZZZZZ	LR200	1.00	11490																														
ZZZZZZ	LR300	1.00	11560																														
CCV	MCCV2	1.00	12020		X		X		X			X		X						X				X	X	X				X			X
CCB	CCB2	1.00	12090		X		X		X			X		X						X				X	X	X				X			X
ZZZZZZ	VS66MB1	2.00	12150																														
ZZZZZZ	VS66MB2	2.00	12210																														
ZZZZZZ	VS66MB3	2.00	12270																														
ZZZZZZ	VS66MB1SPK	2.00	12340																														
ZZZZZZ	VS66MB2SPK	2.00	12400																														
ZZZZZZ	VS66MB3SPK	2.00	12460																														
ZZZZZZ	VR63Q	10.00	12520																														
ZZZZZZ	VS55A	2.00	12590																														
ZZZZZZ	VS64A	20.00	13050																														
ZZZZZZ	VS66A	2.00	13110																														
CCV	MCCV3	1.00	13180		X		X		X			X		X						X				X	X	X				X			X
CCB	CCB3	1.00	13240		X		X		X			X		X						X				X	X	X				X			X
ZZZZZZ	VS14ADUP	20.00	13390																														
ZZZZZZ	VS14A	20.00	13450																														
ZZZZZZ	VS14ASPK	20.00	13510																														
ZZZZZZ	VS14B	20.00	13580																														
ZZZZZZ	VS14D	20.00	14040																														
ZZZZZZ	VS14H	20.00	14100																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 11/30/2012

SDG: VR80 | RUNID: MS113081 METHOD: PMS | END DATE: 11/30/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	VS66B	2.00	14170																														
ZZZZZZ	VR63O	10.00	14230																														
ZZZZZZ	VR63T	20.00	14290																														
ZZZZZZ	VR63W	20.00	14350																														
CCV	MCCV4	1.00	14420		X		X		X			X		X						X				X	X	X				X			X
CCB	CCB4	1.00	14480		X		X		X			X		X						X				X	X	X				X			X
LCSW	VR80MB2SPK	2.00	14550																														
ZZZZZZ	VS36C	10.00	15010																														
ZZZZZZ	VS44A	50.00	15080																														
HT-01-W-C-121107D	VR80ADUP	10.00	15140		X		X		X			X		X						X				X	X	X				X			X
HT-01-W-C-121107	VR80A	10.00	15200		X		X		X			X		X						X				X	X	X				X			X
HT-01-W-C-121107S	VR80ASPK	10.00	15270		X		X		X			X		X						X				X	X	X				X			X
HT-04-W-C-121107	VR80B	10.00	15330		X		X		X			X		X						X				X	X	X				X			X
ZZZZZZ	VQ39A	10.00	15390																														
ZZZZZZ	VT20A	20.00	15450																														
ZZZZZZ	VR65B	50.00	15520																														
CCV	MCCV5	1.00	15580		X		X		X			X		X						X				X	X	X				X			X
CCB	CCB5	1.00	16050		X		X		X			X		X						X				X	X	X				X			X

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 12/4/2012

SDG: VR80 | RUNID: MS120481 METHOD: PMS | END DATE: 12/4/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	09030							X													X										
S1	S1	1.00	09090							X													X										
S2	S2	1.00	09150							X													X										
S3	S3	1.00	09210							X													X										
S4	S4	1.00	09270							X													X										
ZZZZZZ	Rinse Sampl	1.00	09340																														
ICV	MICV	1.00	10070							X													X										
ICB	ICB	1.00	10140							X													X										
CCV	MCCV1	1.00	10200							X													X										
CCB	CCB1	1.00	10260							X													X										
CRI	MCRI	1.00	10320							X													X										
ICSA	ICSAI	1.00	10380							X													X										
ICSAB	ICSABI	1.00	10440							X													X										
ZZZZZZ	LR200	1.00	10510																														
ZZZZZZ	LR300	1.00	10570																														
CCV	MCCV2	1.00	11040							X													X										
CCB	CCB2	1.00	11110							X													X										
ZZZZZZ	VT41MB2	2.00	11190																														
ZZZZZZ	VS42RMB	2.00	11260																														
ZZZZZZ	DI CHECK	1.00	11320																														
ZZZZZZ	ERA P197	10.00	11380																														
HT-01-W-C-121107D	VR80ADUP	5.00	11440							X													X										
HT-01-W-C-121107	VR80A	5.00	11510							X													X										
HT-01-W-C-121107S	VR80ASPK	5.00	11570							X													X										
HT-04-W-C-121107	VR80B	5.00	12030							X													X										
ZZZZZZ	VS42RMBSPK	2.00	12100																														
LCSW	VR80MB2SPK	2.00	12160																														
CCV	MCCV3	1.00	12220							X													X										
CCB	CCB3	1.00	12290							X													X										

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 12/6/2012

SDG: VR80 | RUNID: MS120681 METHOD: PMS | END DATE: 12/6/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	09220											X						X													
S1	S1	1.00	09280											X						X													
S2	S2	1.00	09340											X						X													
S3	S3	1.00	09400											X						X													
S4	S4	1.00	09460											X						X													
ZZZZZZ	Rinse Sampl	1.00	09530																														
ICV	MICV	1.00	10020											X						X													
ICB	ICB	1.00	10090											X						X													
CCV	MCCV1	1.00	10150											X						X													
CCB	CCB1	1.00	10210											X						X													
CRI	MCRI	1.00	10270											X						X													
ICSA	ICSAI	1.00	10330											X						X													
ICSAB	ICSABI	1.00	10390											X						X													
ZZZZZZ	LR200	1.00	10460																														
ZZZZZZ	LR300	1.00	10520																														
CCV	MCCV2	1.00	10590											X						X													
CCB	CCB2	1.00	11050											X						X													
ZZZZZZ	VS49MB1	2.00	11160																														
ZZZZZZ	VT32BDUP	20.00	11220																														
ZZZZZZ	VT32B	20.00	11280																														
ZZZZZZ	VT32BSPK	20.00	11350																														
ZZZZZZ	VS66IDUP	5.00	11410																														
ZZZZZZ	VS66I	5.00	11470																														
ZZZZZZ	VS66ISPK	5.00	11540																														
ZZZZZZ	VS49MB1SPK	2.00	12000																														
ZZZZZZ	VT53MBSPK	2.00	12060																														
ZZZZZZ	VT65MB1SPK	2.00	12130																														
CCV	MCCV3	1.00	12190											X						X													
CCB	CCB3	1.00	12260											X						X													
ZZZZZZ	VS66A	20.00	12310																														
ZZZZZZ	VS66B	5.00	12380																														
ZZZZZZ	VS66D	5.00	12440																														
ZZZZZZ	VS66F	5.00	12500																														
ZZZZZZ	VS66H	5.00	12560																														
ZZZZZZ	VS66J	5.00	13030																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 12/6/2012

SDG: VR80 | RUNID: MS120681 METHOD: PMS | END DATE: 12/6/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	VS66K	5.00	13090																														
ZZZZZZ	VS66L	5.00	13150																														
ZZZZZZ	VS66M	5.00	13220																														
HT-04-W-C-dup-1211	VR80C	5.00	13280																														
CCV	MCCV4	1.00	13340											X						X													
CCB	CCB4	1.00	13410											X						X													
S0	S0	1.00	13470											X						X													
CCV	MCCV5	1.00	13550											X						X													
CCB	CCB5	1.00	14010											X						X													
WS-10-W-C-121107	VR80D	5.00	14080											X						X													
HT-04-W-C-121107	VR80F	5.00	14140											X																			
HT-04-W-C-dup-1211	VR80G	5.00	14210											X																			
WS-10-W-C-121107	VR80H	5.00	14270											X																			
HT-01-W-C-121107D	VR80EDUP	5.00	14330											X																			
HT-01-W-C-121107	VR80E	5.00	14400											X																			
HT-01-W-C-121107S	VR80ESPK	5.00	14460											X																			
ZZZZZZ	VT65ADUP	10.00	14520																														
ZZZZZZ	VT65A	10.00	14580																														
ZZZZZZ	VT65ASPK	10.00	15050																														
CCV	MCCV6	1.00	15110											X						X													
CCB	CCB6	1.00	15180											X						X													
ZZZZZZ	VT79MB	2.00	15420																														
ZZZZZZ	VT81MB	2.00	15480																														
ZZZZZZ	VS66A	20.00	15540																														
ZZZZZZ	VS66B	10.00	16010																														
ZZZZZZ	VS66D	10.00	16070																														
ZZZZZZ	VU18A	2.00	16130																														
ZZZZZZ	VU22E	2.00	16200																														
ZZZZZZ	VT79B	2.00	16260																														
ZZZZZZ	VU18MBSPK	2.00	16320																														
ZZZZZZ	VT79MBSPK	2.00	16380																														
CCV	MCCV7	1.00	16450											X						X													
CCB	CCB7	1.00	16510											X						X													
ZZZZZZ	VS66F	10.00	16570																														
ZZZZZZ	VS66H	10.00	17030																														

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: PE ELAN 6000 MS | START DATE: 12/6/2012

SDG: VR80 | RUNID: MS120681 METHOD: PMS | END DATE: 12/6/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
ZZZZZZ	VS66J	10.00	17100																														
HT-04-W-C-dup-1211	VR80C	2.00	17160											X						X													
ZZZZZZ	VT79ADUP	2.00	17220																														
ZZZZZZ	VT79A	2.00	17290																														
ZZZZZZ	VT79ASPK	2.00	17350																														
ZZZZZZ	VT81A	2.00	17410																														
ZZZZZZ	VT81MBSPK	2.00	17480																														
ZZZZZZ	VT06MB1SPK	20.00	17540																														
CCV	MCCV8	1.00	18000											X						X													
CCB	CCB8	1.00	18070											X						X													

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: NEXION 300D MS | START DATE: 12/7/2012

SDG: VR80 | RUNID: MS120711 METHOD: PMS | END DATE: 12/7/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	09350												X					X													
S1	S1	1.00	09400												X					X													
S2	S2	1.00	09440												X					X													
S3	S3	1.00	09480												X					X													
S4	S4	1.00	09530												X					X													
S5	S5	1.00	09590																														
ZZZZZZ	Rinse sampl	1.00	10060																														
ICV	MICV	1.00	10130												X					X													
ICB	ICB	1.00	10190												X					X													
CCV	MCCV1	1.00	10240												X					X													
CCB	CCB1	1.00	10300												X					X													
ZZZZZZ	ZZZZZZ	1.00	10340																														
ZZZZZZ	ZZZZZZ	1.00	10380																														
ZZZZZZ	ZZZZZZ	1.00	10450																														
ZZZZZZ	ZZZZZZ	1.00	10520																														
CRI	MCRI	1.00	11000												X					X													
ICSA	ICSAI	1.00	11040												X					X													
ICSAB	ICSABI	1.00	11100												X					X													
ZZZZZZ	LR200	1.00	11170																														
ZZZZZZ	LR300	1.00	11240																														
ZZZZZZ	B1	1.00	11310																														
CCV	MCCV2	1.00	11440												X					X													
CCB	CCB2	1.00	11510												X					X													
PBW	VR80RMB1	2.00	11550												X																		
HT-01-W-C-121107D	VR80RADUP	2.00	11590												X																		
HT-01-W-C-121107	VR80RA	2.00	12030												X																		
HT-01-W-C-121107S	VR80RASPK	2.00	12070												X																		
HT-01-W-C-121107D	VR80REDUP	2.00	12110																	X													
HT-01-W-C-121107	VR80RE	2.00	12150																	X													
HT-01-W-C-121107S	VR80RESPK	2.00	12190																	X													
HT-04-W-C-121107	VR80RB	2.00	12240												X																		
HT-04-W-C-dup-1211	VR80RC	2.00	12290												X																		
LCSW	VR80RMB1SPK	2.00	12330												X																		
CCV	MCCV3	1.00	12370												X					X													
CCB	CCB3	1.00	12440												X					X													

FORM XIV

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: NEXION 300D MS | START DATE: 12/7/2012

SDG: VR80 | RUNID: MS120711 METHOD: PMS | END DATE: 12/7/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
PBW	VR80RMB2	2.00	12480																	X													
ZZZZZZ	VT87MB1	2.00	12520																														
WS-10-W-C-121107	VR80RD	2.00	12560												X																		
HT-04-W-C-121107	VR80RF	2.00	13000																	X													
HT-04-W-C-dup-1211	VR80RG	2.00	13050																	X													
WS-10-W-C-121107	VR80RH	2.00	13090																	X													
ZZZZZZ	VT87ADUP	2.00	13140																														
ZZZZZZ	VT87A	2.00	13180																														
ZZZZZZ	VT87ASPK	2.00	13220																														
LCSW	VR80RMB2SPK	2.00	13260																	X													
CCV	MCCV4	1.00	13300												X					X													
CCB	CCB4	1.00	13370												X					X													

Analysis Run Log

ANALYTICAL RESOURCES INCORPORATED

CLIENT: Anchor QEA, LLC

PROJECT: City of Kenmore | INSTRUMENT ID: CETAC MERCURY | START DATE: 11/16/2012

SDG: VR80 | RUNID: HG111601 | METHOD: CVA | END DATE: 11/16/2012

CLIENT ID	ARI ID	DIL.	TIME	%R	AG	AL	AS	B	BA	BE	CA	CD	CO	CR	CU	FE	HG	K	MG	MN	MO	NA	NI	PB	SB	SE	SI	SN	TI	TL	U	V	ZN
S0	S0	1.00	09055														X																
S0.1	S0.1	1.00	09073														X																
S0.5	S0.5	1.00	09090														X																
S1	S1	1.00	09104														X																
S2	S2	1.00	09122														X																
S5	S5	1.00	09135														X																
S10	S10	1.00	09153														X																
ICV	AICV	1.00	09230														X																
ICB	ICB	1.00	09244														X																
CCV	ACCV1	1.00	09262														X																
CCB	CCB1	1.00	09280														X																
CRA	CRA	1.00	09293														X																
PBW	VR80MB1	1.00	09311														X																
LCSW	VR80MB1SPK	1.00	09324														X																
HT-01-W-C-121107	VR80A	1.00	09342														X																
HT-01-W-C-121107D	VR80ADUP	1.00	09360														X																
HT-01-W-C-121107S	VR80ASPK	1.00	09373														X																
HT-04-W-C-121107	VR80B	1.00	09391														X																
HT-04-W-C-dup-1211	VR80C	1.00	09405														X																
WS-10-W-C-121107	VR80D	1.00	09422														X																
PBW	VR80MB2	1.00	09440														X																
CCV	ACCV2	1.00	09454														X																
CCB	CCB2	1.00	09472														X																
LCSW	VR80MB2SPK	1.00	09490														X																
HT-01-W-C-121107	VR80E	1.00	09504														X																
HT-01-W-C-121107D	VR80EDUP	1.00	09521														X																
HT-01-W-C-121107S	VR80ESPK	1.00	09535														X																
HT-04-W-C-121107	VR80F	1.00	09552														X																
HT-04-W-C-dup-1211	VR80G	1.00	09570														X																
WS-10-W-C-121107	VR80H	1.00	09584														X																
ZZZZZZ	VR73MB1	1.00	10001																														
ZZZZZZ	VR73MB1SPK	1.00	10015																														
ZZZZZZ	VR73A	1.00	10033																														
CCV	ACCV3	1.00	10051														X																
CCB	CCB3	1.00	10065														X																

FORM XIV

General Chemistry Analysis
Report and Summary QC Forms

ARI Job ID: VR80

SAMPLE RESULTS-CONVENTIONALS
VR80-Anchor QEA, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized: AC
Reported: 12/11/12

Project: City of Kenmore
Event: NA
Date Sampled: 11/07/12
Date Received: 11/08/12

Client ID: HT-01-W-C-121107
ARI ID: 12-22456 VR80A

Analyte	Date Batch	Method	Units	RL	Sample
Total Dissolved Solids	11/12/12 111212#1	SM2540C	mg/L	5.0	76.0
Total Suspended Solids	11/12/12 111212#1	SM2540D	mg/L	1.5	13.8

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
VR80-Anchor QEA, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized: QC
Reported: 12/11/12

Project: City of Kenmore
Event: NA
Date Sampled: 11/07/12
Date Received: 11/08/12

Client ID: HT-04-W-C-121107
ARI ID: 12-22457 VR80B

Analyte	Date Batch	Method	Units	RL	Sample
Total Dissolved Solids	11/12/12 111212#1	SM2540C	mg/L	5.0	78.0
Total Suspended Solids	11/12/12 111212#1	SM2540D	mg/L	1.1	3.7

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
VR80-Anchor QEA, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized: QC
Reported: 12/11/12

Project: City of Kenmore
Event: NA
Date Sampled: 11/07/12
Date Received: 11/08/12

Client ID: HT-04-W-C-dup-121107
ARI ID: 12-22458 VR80C

Analyte	Date Batch	Method	Units	RL	Sample
Total Dissolved Solids	11/12/12 111212#1	SM2540C	mg/L	5.0	74.0
Total Suspended Solids	11/12/12 111212#1	SM2540D	mg/L	1.1	3.4

RL Analytical reporting limit
U Undetected at reported detection limit

SAMPLE RESULTS-CONVENTIONALS
VR80-Anchor QEA, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized: QL
Reported: 12/11/12

Project: City of Kenmore
Event: NA
Date Sampled: 11/07/12
Date Received: 11/08/12

Client ID: WS-10-W-C-121107
ARI ID: 12-22459 VR80D

Analyte	Date Batch	Method	Units	RL	Sample
Total Dissolved Solids	11/12/12 111212#1	SM2540C	mg/L	5.0	59.0
Total Suspended Solids	11/12/12 111212#1	SM2540D	mg/L	1.1	2.0

RL Analytical reporting limit
U Undetected at reported detection limit

REPLICATE RESULTS-CONVENTIONALS
VR80-Anchor QEA, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized:
Reported: 12/11/12

Project: City of Kenmore
Event: NA
Date Sampled: 11/07/12
Date Received: 11/08/12

Analyte	Method	Date	Units	Sample	Replicate(s)	RPD/RSD
ARI ID: VR80A Client ID: HT-01-W-C-121107						
Total Dissolved Solids	SM2540C	11/12/12	mg/L	76.0	68.5	10.4%

LAB CONTROL RESULTS-CONVENTIONALS
VR80-Anchor QEA, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized: a
Reported: 12/11/12

Project: City of Kenmore
Event: NA
Date Sampled: NA
Date Received: NA

Analyte/Method	QC ID	Date	Units	LCS	Spike Added	Recovery
Total Dissolved Solids SM2540C	ICVL	11/12/12	mg/L	500	500	100.0%
Total Suspended Solids SM2540D	ICVL	11/12/12	mg/L	50.0	50.0	100.0%

METHOD BLANK RESULTS-CONVENTIONALS
VR80-Anchor QEA, LLC

ANALYTICAL RESOURCES INCORPORATED

Matrix: Water
Data Release Authorized: Q
Reported: 12/11/12

Project: City of Kenmore
Event: NA
Date Sampled: NA
Date Received: NA

Analyte	Method	Date	Units	Blank	ID
Total Dissolved Solids	SM2540C	11/12/12	mg/L	< 5.0 U	
Total Suspended Solids	SM2540D	11/12/12	mg/L	< 1.0 U	

Semivolatile Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: VR80

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

8270 BAN –Water
Liquid/Liquid (3520C) (SOP # 3311S)

Preparation Test BAN # 2 (BANWLI)

In-House (1.0-10.0ppb)

ARI Job No(s) VR80

Batch set up by: SP

Bottle #	Extraction Requirements	Volume Extracted	Disassemble Liq/Liq (Mantle #)	DryVap Module # Y/N	Final Effective Volume	Volume to Lab	Comments	Verify Client ID
	VR80 MBW	500mL	14	# Y/N	0.5mL	0.5mL		M 11/13/12
	SBW	500mL	15	# Y/N	0.5mL	0.5mL		
	SBW Dup	500mL	16	# Y/N	0.5mL	0.5mL		
	QLS	500mL		# Y/N	0.5mL	0.5mL		
8	VR80 A	500mL	17	# Y/N	0.5mL	0.5mL		
5	B	500mL	18	# Y/N	0.5mL	0.5mL		Analyst/Date
7	C	500mL	19	# Y/N	0.5mL	0.5mL		KD 80-85°C Y N
6	D	500mL	20	# Y/N	0.5mL	0.5mL		
		500mL		# Y/N	0.5mL	0.5mL		
		500mL		# Y/N	0.5mL	0.5mL		YL
		500mL		# Y/N	0.5mL	0.5mL		
		500mL		# Y/N	0.5mL	0.5mL		11/14/12
		500mL		# Y/N	0.5mL	0.5mL		
		500mL		# Y/N	0.5mL	0.5mL		Analyst/Date
		500mL		# Y/N	0.5mL	0.5mL		TurboVap 1 2 3
		500mL		# Y/N	0.5mL	0.5mL		RR
		500mL		# Y/N	0.5mL	0.5mL		
		500mL		# Y/N	0.5mL	0.5mL		11/14/12
		500mL		# Y/N	0.5mL	0.5mL	RR 11/14/12	
Analyst/Date	M	M 11/13/12	M 11/14/12		RR 11/14/12	RR 11/14/12		Analyst/Date

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate	A (2032-1)	100/150µg/mL	125µL	7/2/13	M	AC
Full List Spike (Freezer)	7 (2017-2)	100µg/mL	125µL	3/14/13	M	AC
Base Spike	56 (1978-2)	200µg/mL	125µL	11/17/12	M	AC
Acid Spike	38 (2024-3)	100/200µg/mL	125µL	4/11/13	M	AC
QLS Spike (Freezer)	14 ( )	10-100µg/mL	50µL			
Extraction Time:	11:25	Liq/Liq Start:	1155		Liq/Liq Stop:	0625

SPECIAL INSTRUCTIONS: 1. Add ~200mL DCM to Liq/Liq. 2. Add 500mL sample. 3. Add surr/spk. 4. Adjust Acid (pH <2) using 1:1 Sulfuric Acid. (1/4 pipet for blanks & 1/2 pipet for samples). Stir to mix. Verify pH! Let sit 10 minutes. Verify pH again. 5. Extract minimum 8 hrs. 6. DryVap to 0.5mL or KD (NO drying column) to 8mL at 80°. 7. (If KD)=TurboVap to 0.5mL. 8. Vial in DCM.

A. Archive Y /N

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: VR 80

Client ID: Anchor QEA, LLC

Parameter: BAN

Client Project: City of Kenmore

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☒ No Anomalies A-D	MLH 13/12
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions). (Centrifuge#1 used for all Centrifugations)	

3056F

Revision 009
08/14/12

Semivolatile Raw Data
Initial Calibration

ARI Job ID: VR80

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS,SVOA Initial Calibration Notes

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Instrument: NT-4 (NT-6) NT-8 NT-10 NT11 NT12

Curve Date(s): 10/19/12 Internal Standard ID 1998-2 Expiration 7/3/13

DFTPP Tune Meets Criteria?	(YES) / NO	Minimum Response Factors Met/	(YES) / NO
DDT Breakdown <20%?	(YES) / NO	ICV Exceeding ±20%?	YES / (NO)
Peak Tailing Factor ≤2?	(YES) / NO	ICV Exceeding ±30%?	YES / (NO)
ICal Meets %RSD & r^2 Criteria?	(YES) / NO	Linear Fits Used?	YES / (NO)
Q flag applied?	YES / NO / (NA)	Quadratic Fits Used?	(YES) / NO
Manual Integrations for ICal?	(YES) / NO	Calibration Points Dropped?	(YES) / NO
Spectral Library Updated?	(YES) / NO		

Primary Source	Standard #	Expiration	Secondary Source	Standard #	Expiration
Ultra	2001-1	1/15/13	Restek	1972-2	11/7/12
↓	2002-1	1/16/13	↓	1973-2	11/7/12
↓	2003-1	↓	↓	1974-1	11/7/12
in house stock	2004-1	1/16/13	in house stock	2004-1	1/16/13
Cambridge	1736-3	8/4/2021	Cambridge	1736-3	8/4/2021
in house stock	1999-2	1/4/13	in house stock	5824-1	2/17/13
SPEX or Restek	2027-2	10/4/13	SPEX or Restek	2027-2	10/4/13
in house stock	1999-1	1/4/13	in house stock	1999-1	1/4/13

Detail problems, corrective actions and/or other pertinent information below:

1) Quadratic fit used: 4-chloroaniline, 2,4-Dinitrophenol, Benzidine
2) Naphthalene, Pyrene, 3,3'-Dichlorobenzidine: curve up to 60ppm.
3) 3-Nitroaniline: curve up to 40ppm
4) 2,4-Dinitrophenol, 4,6-Dinitro-2-methylphenol, Benzidine: first curve point dropped.

Analyst: [signature] **Date:** 10/22/12

Reviewer: [signature] **Date:** 10/22/12

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Batch File: /chem2/nt6.i/20121019.b
Inst ID: nt6.i

ID.	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME	10191201	10191202	10191203	10191204	10191205	10191206	10191207	10191208
INJ DATE	19-OCT-2012	19-OCT-2012	19-OCT-2012	19-OCT-2012	19-OCT-2012	19-OCT-2012	19-OCT-2012	19-OCT-2012
INJ TIME	16.20	16:54	17:28	18:03	18:37	19 12	19:46	20:20

10/22/12

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	6.170	+++++	6.173	6.170	6 167	6 172	6.184	+++++	6.170	3.170-9 170	6.173	0.006
186 Carbaryl	16.277	+++++	16.270	16.272	16.274	16.285	16.291	16.297	16.277	13 277-19 277	16.281	0.010
179 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.225	5 225-11.225	+++++	+++++
180 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.363	11 363-17.363	+++++	+++++
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.531	15.531-21.531	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.634	13.634-19.634	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.609	14.609-20.609	+++++	+++++
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.863	13.863-19.863	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.605	17.605-23.605	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.015	14.015-20 015	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.609	14.609-20.609	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.562	14.562-20.562	+++++	+++++
177 p-Benzoquinone	6.816	+++++	6.820	6 817	6.813	6 819	6 831	6.825	6.816	3.816-9.816	6 820	0 006
168 Pentachlorobenzene	13.441	+++++	13.433	13 441	13.437	13 448	13.455	13.455	13.441	10.441-16 441	13.444	0.008
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.212	44.212-50 212	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.746	44.746-50.746	+++++	+++++
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.216	45.216-51.216	+++++	+++++

Reviewer 1 _____ Date: _____
Reviewer 2 _____ Date: 10/22/12

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Batch File: /chem2/nt6.i/20121019.b
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
148 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.281	44.281-50.281	+++++	+++++
149 TCMX	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.387	40.387-46.387	+++++	+++++
150 DCBP	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.989	47 989-53.989	+++++	+++++
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	67 733	64.733-70.733	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.067	62 067-68.067	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.917	46.917-52.917	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13 871	10.871-16 871	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39 317	36.317-42.317	+++++	+++++
$ 137 d8-1,4-Dioxane	2.697	+++++	2.722	2.724	2.700	2.705	2 738	2.738	2.697	0.000-5.697	2.718	0.017
* 134 Di-n-octylphthalate-d4	20.936	20.933	20.934	20.930	20.932	20.933	20.934	20.939	20.936	17.936-23.936	20.934	0.003
133 Butylatedhydroxytoluen	13.259	+++++	13.257	13 259	13.256	13.261	13.262	13.268	13.259	10.259-16.259	13.260	0 004
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65 450	62.450-68.450	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	64.400	61.400-67.400	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	62.100	59.100-65.100	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.912	51.912-57.912	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.212	51.212-57.212	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	57.650	54.650-60.650	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.750	53 750-59 750	+++++	+++++
144 alpha-Terpineol	10 262	+++++	10.260	10.262	10.259	10 270	10.276	10 276	10.262	7.262-13.262	10.266	0.007
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.166	49.166-55.166	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Batch File: /chem2/nt6.i/20121019.b
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.617	47.617-53.617	+++++	+++++
123 Acetophenone	8.846	+++++	8.839	8.841	8.843	8.849	8.861	8.860	8.846	5.846-11.846	8.848	0.009
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.467	40.467-46.467	+++++	+++++
143 1,4-Dioxane	2.751	2.759	2.776	2 773	2 753	2 759	2.792	2.792	2 751	0.000-5.751	2.769	0.016
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.500	51.500-57.500	+++++	+++++
120 2,3,4,6-Tetrachlorophe	13.681	+++++	13.679	13.681	13.683	13 689	13 690	13.695	13.681	10.681-16.681	13.685	0.006
178 2-Benzyl-4-Chloropheno	16.234	+++++	16.227	16.229	16.226	16.242	16.249	16.254	16.234	13.234-19.234	16 237	0.011
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.069	44.069-50.069	+++++	+++++
118 Triphenyl Phosphate	19.322	+++++	19.320	19.317	19.319	19.325	19.326	19.331	19 322	16.322-22 322	19.323	0.005
117 Butyl Diphenyl Phospha	17.714	+++++	17.712	17 709	17 711	17.711	17.718	17.718	17.714	14.714-20.714	17.713	0 003
116 Dibutyl Phenyl Phospha	16.026	+++++	16 019	16.016	16.018	16.029	16.040	16 046	16.026	13.026-19.026	16.028	0.012
115 Tributyl Phosphate	14 285	+++++	14 272	14.274	14.276	14.287	14.299	14.309	14 285	11.285-17.285	14.286	0.014
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48 950	45.950-51.950	+++++	+++++
113 Diphenyl Oxide	12.340	+++++	12.338	12 335	12.342	12.342	12.344	12.349	12 340	9.340-15.340	12.341	0 004
112 Biphenyl	12.148	+++++	12 146	12.143	12.145	12.150	12.157	12.156	12 148	9.148-15.148	12.149	0 006
111 Azobenzene (1,2-DP-Hyd	14.236	+++++	14.229	14.231	14 233	14.239	14.245	14.251	14.236	11.236-17.236	14.238	0.008
110 Tetrachloroguaiacol	15.417	+++++	15.410	15.412	15.414	15.425	15 431	15.437	15.417	12 417-18 417	15.421	0 010
109 3,4,5-Trichloroguaiaco	13.782	+++++	13.775	13.777	13.779	13.785	13.791	13.791	13.782	10.782-16.782	13.783	0.006
181 3,4,6-Trichloroguaiaco	13.900	+++++	13.898	13.895	13 897	13.902	13.909	13.914	13 900	10.900-16.900	13.902	0.007
108 4,5,6-Trichloroguaiaco	14.819	+++++	14.817	14.814	14.810	14.821	14.822	14 828	14.819	11.819-17.819	14.819	0 006
184 3,4-Dichloroguaiacol	12.233	+++++	12.231	12.228	12.230	12 230	12 237	12.237	12.233	9.233-15 233	12.232	0.003
107 4,5-Dichloroguaiacol	13.018	+++++	13.017	13.013	13 015	13.021	13 027	13.033	13.018	10.018-16.018	13.021	0.007
182 4,6-Dichloroguaiacol	13.018	+++++	13.017	13.013	13 015	13.021	13.027	13 033	13.018	10 018-16.018	13.021	0.007
185 4-Chloroguaiacol	11.138	+++++	11 136	11.133	11.135	11.140	11.142	11.147	11.138	8.138-14.138	11.139	0.005

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Batch File: /chem2/nt6.i/20121019.b
Inst ID: nt6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
106 Guaiacol	9 113	+++++	9.106	9 108	9 110	9.116	9.128	9.128	9.113	6.113-12.113	9.116	0 009
105 1-methylnaphthalene	11 539	+++++	11.537	11.534	11.536	11.541	11.548	11.547	11 539	8.539-14.539	11.540	0.006
151 1,2,4,5-Tetrachloroben	11.710	+++++	11.702	11 705	11 706	11.707	11 713	11.713	11 710	8.710-14.710	11.708	0.004
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.943	27.943-33.943	+++++	+++++
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.442	20.442-26.442	+++++	+++++
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.968	18.968-24 968	+++++	+++++
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.466	20.466-26.466	+++++	+++++
156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.866	19.866-25 866	+++++	+++++
157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.413	20.413-26.413	+++++	+++++
158 Ethion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.952	21 952-27 952	+++++	+++++
159 4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.721	18 721-24.721	+++++	+++++
160 Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.159	15.159-21.159	+++++	+++++
161 1,2,3-Trichloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.246	33.246-39.246	+++++	+++++
162 1,2,3,4-Tetrachloronap	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37 506	34.506-40.506	+++++	+++++
163 1,2,3,5,8-Pentachloron	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.893	35 893-41 893	+++++	+++++
164 1,2,3,4,6,7-Hexachloro	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.681	36.681-42 681	+++++	+++++
165 1,2,3,4,5,6,7-Heptachl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	41.123	38.123-44.123	+++++	+++++
166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.253	39.253-45.253	+++++	+++++
$ 2 Phenol-d5	7.714	+++++	7.707	7.709	7.705	7.716	7.728	+++++	7.714	4.714-10 714	7.713	0.008
3 Phenol	7 735	+++++	7.723	7.725	7.727	7.738	7.749	7 744	7.735	4.735-10.735	7 734	0 010
4 Bis(2-Chloroethyl)ethe	7.815	+++++	7.813	7.810	7.812	7.818	7.824	7.824	7 815	4.815-10.815	7 817	0.006
$ 5 2-Chlorophenol-d4	7.847	+++++	7.840	7 842	7.839	7.850	7.856	+++++	7.847	4.847-10 847	7 846	0.007

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Batch File: /chem2/nt6.i/20121019.b
Inst ID: nt6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
6	2-Chlorophenol	7.869	+++++	7.867	7 864	7.865	7.871	7.883	7.877	7.869	4 869-10.869	7.871	0.007
7	1,3-Dichlorobenzene	8.088	+++++	8.081	8.083	8.084	8.085	8.091	8.091	8.088	5.088-11.088	8.086	0 004
* 8	1,4-Dichlorobenzene-d4	8.146	8.144	8 145	8.147	8.149	8.149	8.150	8.150	8.146	5.146-11.146	8.147	0.002
9	1,4-Dichlorobenzene	8 173	+++++	8.171	8.173	8.170	8 176	8.182	8.177	8.173	5.173-11.173	8 175	0.004
$ 10	1,2-Dichlorobenzene-d4	8 451	+++++	8.449	8.446	8.448	8.448	8.455	+++++	8 451	5.451-11.451	8.449	0 003
11	Benzyl alcohol	8.430	+++++	8 422	8.424	8.426	8.437	8.449	8.449	8.430	5.430-11.430	8.434	0.011
12	1,2-Dichlorobenzene	8.467	+++++	8.465	8.467	8 469	8 469	8 476	8.476	8.467	5.467-11 467	8.470	0.004
13	2-Methylphenol	8.670	+++++	8.663	8.665	8.661	8.672	8 684	8 684	8.670	5.670-11.670	8.671	0.010
14	2,2'-oxybis(1-Chloropr	8.691	+++++	8.690	8.692	8.688	8.694	8 700	8 700	8.691	5.691-11.691	8.694	0 005
15	4-Methylphenol	8 900	+++++	8.893	8.895	8.896	8.907	8.919	8.919	8.900	5.900-11 900	8.904	0.011
16	N-Nitroso-di-n-propyla	8.910	+++++	8 903	8 900	8 902	8.918	8 930	8.930	8.910	5 910-11.910	8.913	0 013
17	Hexachloroethane	8.964	+++++	8.957	8.964	8.961	8.961	8 967	8 967	8 964	5.964-11 964	8.963	0.004
$ 18	Nitrobenzene-d5	9.087	+++++	9.079	9.082	9.078	9.089	9.096	+++++	9.087	6.087-12.087	9.085	0.007
19	Nitrobenzene	9.113	+++++	9.106	9.108	9.110	9.116	9 128	9.122	9.113	6 113-12 113	9.115	0.008
20	Isophorone	9.498	+++++	9.491	9.493	9.489	9.500	9.512	9 517	9.498	6.498-12.498	9 500	0.011
21	2-Nitrophenol	9 632	+++++	9.630	9 632	9.628	9 634	9.641	9.640	9.632	6.632-12.632	9.634	0.005
22	2,4-Dimethylphenol	9 744	+++++	9.737	9.739	9.741	9 746	9.753	9 758	9.744	6 744-12 744	9.745	0.008
23	Bis(2-Chloroethoxy)met	9.888	+++++	9.886	9.888	9.885	9.896	9.902	9 902	9.888	6.888-12.888	9.892	0.007
24	Benzoic acid	9.979	+++++	9.849	9.899	9.922	10 019	10.079	10.100	9.979	6.979-12.979	9.978	0.094
25	2,4-Dichlorophenol	10 016	+++++	10 014	10.016	10.013	10.019	10 030	10.030	10.016	7.016-13.016	10.020	0.007
26	1,2,4-Trichlorobenzene	10.150	+++++	10.143	10 145	10 147	10.152	10.159	10 159	10.150	7.150-13 150	10.150	0.006
* 27	Naphthalene-d8	10 209	10.201	10.201	10.203	10.205	10.206	10 212	10.212	10.209	7 208-13.209	10 206	0.004
28	Naphthalene	10 241	+++++	10.233	10.235	10.237	10.243	10.250	10 249	10.241	7.241-13 241	10 241	0.006
29	4-Chloroaniline	10 379	+++++	10.378	10.380	10 376	10.387	10 394	10.394	10 379	7.379-13.379	10.384	0.007

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Batch File: /chem2/nt6.i/20121019.b
Inst ID: nt6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	30 Hexachlorobutadiene	10 561	+++++	10.559	10.561	10.558	10 558	10.565	10 565	10 561	7 561-13 561	10.561	0.003
	31 4-Chloro-3-methylpheno	11.197	+++++	11.190	11.192	11.194	11.199	11.206	11 206	11.197	8.197-14.197	11 197	0.006
	32 2-Methylnaphthalene	11.368	+++++	11.361	11 363	11 365	11.370	11.377	11.377	11 368	8.368-14.368	11.368	0.006
	33 Hexachlorocyclopentadi	11.752	+++++	11.745	11 747	11.749	11.749	11.751	11.756	11.752	8.752-14.752	11.750	0.003
	34 2,4,6-Trichlorophenol	11.886	+++++	11.879	11.881	11.883	11.883	11.890	11.889	11 886	8.886-14.886	11.884	0.004
	35 2,4,5-Trichlorophenol	11.939	+++++	11.938	11.940	11.936	11.942	11.948	11.948	11.939	8 939-14.939	11.942	0 005
$	36 2-Fluorobiphenyl	12.014	+++++	12 007	12.009	12.011	12.017	12.023	+++++	12.014	9.014-15 014	12.013	0 006
	37 2-Chloronaphthalene	12.153	+++++	12.146	12.148	12.145	12.155	12.162	12.162	12.153	9 153-15 153	12.153	0.007
	38 2-Nitroaniline	12.383	+++++	12.376	12.378	12 380	12 385	12.397	12.397	12.383	9.383-15.383	12.385	0 009
	39 Dimethylphthalate	12 757	+++++	12.750	12.752	12.754	12.759	12.771	12.776	12.757	9.757-15.757	12.760	0.010
	40 Acenaphthylene	12.831	+++++	12.830	12.832	12.828	12.834	12.840	12.840	12 831	9 831-15 831	12.834	0.005
	41 2,6-Dinitrotoluene	12.848	+++++	12.840	12 848	12.844	12.855	12.862	12.867	12.848	9.848-15.848	12.852	0.010
*	42 Acenaphthene-d10	13.088	13.080	13.086	13 088	13 085	13.090	13.092	13 091	13 088	10 088-16 088	13 088	0.004
	43 3-Nitroaniline	13.067	+++++	13.054	13 056	13.058	13.069	13.081	13.081	13 067	10.067-16.067	13.066	0.011
	44 Acenaphthene	13 136	+++++	13 134	13.136	13.133	13.144	13.145	13.150	13 136	10 136-16.136	13.140	0 007
	45 2,4-Dinitrophenol	13.232	+++++	13.220	13.222	13.224	13.235	13.246	13.252	13.232	10 232-16.232	13.233	0 012
	46 Dibenzofuran	13 403	+++++	13.396	13.393	13.400	13.406	13 412	13.417	13.403	10 403-16 403	13.404	0 009
	47 4-Nitrophenol	13 366	+++++	13.364	13.361	13.363	13 373	13 385	13 391	13.366	10 366-16.366	13.372	0.012
	48 2,4-Dinitrotoluene	13 483	+++++	13.471	13.473	13.475	13.486	13.498	13 503	13.483	10.483-16.483	13.484	0.012
	49 Fluorene	13.964	+++++	13 957	13.954	13 956	13 966	13.973	13.973	13.964	10.964-16.964	13.963	0 008
	50 Diethylphthalate	13.916	+++++	13.909	13.911	13 913	13.924	13.930	13.930	13.916	10.916-16 916	13.919	0.009
	51 4-Chlorophenyl-phenyle	13.985	+++++	13.978	13.980	13.982	13 988	13 989	13.989	13.985	10.985-16.985	13.985	0.004
	52 4-Nitroaniline	14.066	+++++	14.053	14 050	14.057	14.073	14.091	14.096	14.066	11.066-17.066	14.069	0.018
	53 4,6-Dinitro-2-methylph	14.140	+++++	14.128	14 130	14 132	14 148	14.165	14.165	14 140	11.140-17.140	14.144	0.016

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Batch File: /chem2/nt6.i/20121019.b
Inst ID: nt6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	54 N-Nitrosodiphenylamine	14.188	+++++	14.181	14.183	14.185	14 196	14.203	14.203	14.188	11 188-17.188	14 191	0.009
$	55 2,4,6-Tribromophenol	14.386	+++++	14.384	14 381	14.383	14.389	14.395	+++++	14.386	11 386-17 386	14 386	0.005
	56 4-Bromophenyl-phenylet	14.771	+++++	14.764	14.766	14.768	14.768	14.774	14.774	14.771	11.771-17.771	14.769	0.004
	57 Hexachlorobenzene	14.995	+++++	14 988	14 990	14.992	14.992	14.999	14.999	14 995	11 995-17.995	14.993	0.004
	58 Pentachlorophenol	15.289	+++++	15.287	15.289	15.286	15.291	15.298	15.298	15.289	12.289-18 289	15.291	0 005
*	59 Phenanthrene-d10	15 476	15.468	15.469	15.471	15.473	15.473	15.479	15 479	15 476	12.476-18.476	15.473	0.004
	60 Phenanthrene	15 513	+++++	15.506	15 508	15.510	15 516	15.522	15.522	15.513	12.513-18.513	15.514	0.006
	61 Anthracene	15.583	+++++	15.576	15.578	15.579	15 590	15.597	15.597	15.583	12.583-18.583	15.586	0.009
	62 Carbazole	15 866	+++++	15.859	15.861	15.863	15 868	15.875	15.875	15.866	12.866-18 866	15 867	0.006
	63 Di-n-butylphthalate	16.576	+++++	16.580	16 577	16.578	16.579	16.585	16 585	16.576	13 576-19 576	16 580	0.004
	64 Fluoranthene	17 458	+++++	17 451	17.453	17.455	17.460	17.467	17.467	17.458	14 458-20 458	17.458	0.006
	65 Pyrene	17.810	+++++	17.809	17.811	17.813	17.818	17.825	17.825	17.810	14.810-20 810	17.816	0 007
$	66 Terphenyl-d14	18.126	+++++	18.124	18.120	18.122	18.123	18.129	+++++	18.126	15 126-21.126	18.124	0.003
	67 Butylbenzylphthalate	19 007	+++++	19 005	19 002	19 004	19.009	19 011	19.016	19.007	16.007-22.007	19.008	0.005
	68 Benzo(a)anthracene	19 776	+++++	19.774	19.777	19.778	19.784	19.791	19.796	19.776	16 776-22.776	19.782	0.008
*	69 Chrysene-d12	19.803	19 800	19.801	19.803	19.805	19.811	19.812	19.817	19.803	16.803-22.803	19.807	0.006
	70 3,3'-Dichlorobenzidine	19.782	+++++	19.780	19.777	19.778	19.784	19.791	19.790	19.782	16 782-22 782	19.783	0.006
	71 Chrysene	19 846	+++++	19.839	19.841	19.843	19 848	19.855	19.860	19.846	16 846-22.846	19 847	0 008
	72 bis(2-Ethylhexyl)phtha	20.001	+++++	19.999	19.996	19.997	20.003	20.004	20 004	20.001	17 001-23.001	20.001	0.003
	73 Di-n-octylphthalate	20.946	+++++	20.939	20.941	20.943	20.949	20.950	20.950	20 946	17.946-23.946	20.945	0 004
	74 Benzo(b)fluoranthene	21.438	+++++	21 431	21 433	21 434	21.445	21.452	21.457	21 438	18 438-24 438	21 441	0 010
	75 Benzo(k)fluoranthene	21.475	+++++	21 463	21 465	21.467	21.483	21.489	21 457	21.475	18.475-24 475	21.471	0 012
	76 Benzo(a)pyrene	21.892	+++++	21 879	21.881	21.883	21.894	21.906	21.906	21.892	18 892-24.892	21 892	0.011
*	77 Perylene-d12	21.972	21 964	21 965	21 967	21.969	21.969	21 976	21.975	21 972	18 972-24 972	21 970	0 004

Analytical Resources, Inc.
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Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Batch File: /chem2/nt6.i/20121019.b
Inst ID: nt6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	78 Indeno(1,2,3-cd)pyrene	23.542	+++++	23.525	23.527	23 534	23.550	23.567	23.567	23.542	20.542-26.542	23.545	0 018
	79 Dibenzo(a,h)anthracene	23.564	+++++	23 546	23.548	23.555	23.577	23 594	23 599	23.564	20 564-26 564	23.569	0.022
	80 Benzo(g,h,i)perylene	23.981	+++++	23.957	23.959	23 967	23.994	24 011	24.021	23.981	20.981-26.981	23.984	0.025
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	51.633	48.633-54.633	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	63 533	60.533-66.533	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	60.273	57.273-63.273	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	78.600	75.600-81.600	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.841	47.841-53.841	+++++	+++++
	90 N-Nitrosodimethylamine	3.472	+++++	3 486	3.494	3.469	3.485	3.540	3 545	3.472	0.472-6 472	3.499	0.031
	91 Aniline	7.698	+++++	7.696	7.698	7.695	7.700	7.707	7.707	7.698	4.698-10.698	7.700	0.005
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
	93 Benzidine	17.698	+++++	17.696	17.698	17.700	17.701	17.707	17.707	17.698	14.698-20 698	17.701	0 004
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.075	49 075-55 075	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.250	46 250-52.250	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	61.202	58.202-64 202	+++++	+++++
	98 Retene	18.377	+++++	18.369	18.372	18.373	18.374	18 380	18.380	18.377	15 377-21.377	18.375	0.004
	99 Perylene	22.004	+++++	21 997	21 994	21.995	22 006	22.018	+++++	22.004	19.004-25.004	22.002	0 009
	100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.074	19.074-25.074	+++++	+++++
	101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.255	19.255-25.255	+++++	+++++
	102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21 369	18.369-24.369	+++++	+++++
	103 Pyridine	3.440	+++++	3.486	3.472	3.448	3 448	3.486	3.502	3.440	0.440-6.440	3.469	0.024
	87 Total Benzofluoranthen	21.475	+++++	21.463	21.465	21.467	21.483	21.489	21.495	21.475	18.475-24.475	21.477	0 013
	88 2,6-Dichlorophenol	10.395	+++++	10.388	10.390	10.387	10.398	10.404	10 404	10 395	7 395-13.395	10.395	0.007
	89 N-Nitrosomethylethylam	5.315	+++++	5.319	5.321	5.317	5.318	5.329	5 329	5.315	2.315-8.315	5.321	0.006

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2012 16:20
End Cal Date : 19-OCT-2012 20:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20121019.b/SW846101912.m
Cal Date : 22-Oct-2012 10:30 jianqing
Curve Type : Average

Calibration File Names:
Level 1: /chem2/nt6.i/20121019.b/10191203.D
Level 2: /chem2/nt6.i/20121019.b/10191204.D
Level 3: /chem2/nt6.i/20121019.b/10191205.D
Level 4: /chem2/nt6.i/20121019.b/10191201.D
Level 5: /chem2/nt6.i/20121019.b/10191206.D
Level 6: /chem2/nt6.i/20121019.b/10191207.D
Level 7: /chem2/nt6.i/20121019.b/10191208.D
Level 8: /chem2/nt6.i/20121019.b/10191202.D

19/7/12

Compound	1.000 Level 1	5 000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60 000 Level 6	RRF	% RSD
	80.000 Level 7	0 20000 Level 8						
186 Carbaryl	0.37079	0 50061	0.48181	0.47416	0.49573	0.45647		
	0.47675	+++++					0.46519	9.478
179 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
180 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2012 16:20
End Cal Date : 19-OCT-2012 20:20
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Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20121019.b/SW846101912.m
Cal Date : 22-Oct-2012 10:30 jianqing
Curve Type : Average

Compound	1 000 Level 1	5 000 Level 2	10 000 Level 3	25.000 Level 4	40.000 Level 5	60 000 Level 6	RRF	% RSD
	80 000 Level 7	0 20000 Level 8						
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
177 p-Benzoquinone	0.05410	0 07182	0 07185	0 08196	0 08342	0.08435		
	0 07854	+++++					0.07515	14.124
168 Pentachlorobenzene	0 56863	0 53849	0.48301	0.48550	0.46477	0.44456		
	0.44204	+++++					0.48957	9.726
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Cal Date : 22-Oct-2012 10:30 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7	0.20000 Level 8						
135 2,3,5,6-Tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
136 2,3,4,5-tetrachlorophenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
133 Butylatedhydroxytoluene	1.11991	1.06037	0.91964	0.93169	0.88146	0.80246		
	0.78317	+++++					0.92839	13.434
132 3,6-Dimethylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Curve Type : Average

Compound	1 000 Level 1	5.000 Level 2	10 000 Level 3	25.000 Level 4	40.000 Level 5	60 000 Level 6	RRF	% RSD
	80.000 Level 7	0 20000 Level 8						
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
144 alpha-Terpineol	0.27722	0.27876	0 24508	0 26549	0.24706	0.24399		
	0.23826	+++++					0.25655	6.588
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
123 Acetophenone	1.98417	2.06263	1.82092	1 75699	1 72245	1 60469		
	1.58357	+++++					1.79077	10.082
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
143 1,4-Dioxane	0 67142	0 68534	0.62754	0 60954	0.62179	0.62032		
	0.63209	0.70135					0 64617	5.350
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
120 2,3,4,6-Tetrachlorophenol	0 29155	0 33553	0.33297	0 34544	0.34030	0 32920		
	0.34363	+++++					0.33123	5.564

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Cal Date : 22-Oct-2012 10:30 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10 000 Level 3	25.000 Level 4	40 000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7	0.20000 Level 8						
178 2-Benzyl-4-Chlorophenol	0 17077	0.17629	0.17289	0.18001	0 18252	0.17313		
	0 17690	+++++					0.17607	2.373
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
118 Triphenyl Phosphate	0 17527	0 18057	0 16335	0.17306	0 17300	0.17043		
	0 17282	+++++					0.17264	3.002
117 Butyl Diphenyl Phosphate	0.20509	0 20841	0 17739	0.17718	0 17323	0.16801		
	0 16727	+++++					0.18237	9.401
116 Dibutyl Phenyl Phosphate	0.61517	0.58191	0 54531	0.55175	0 55137	0.52279		
	0 54155	+++++					0.55855	5.465
115 Tributyl Phosphate	0.96314	0 92709	0 82287	0.79609	0.78268	0.71349		
	0.70168	+++++					0.81529	12.175
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
113 Diphenyl Oxide	0.94663	0 89227	0 79184	0.80836	0 78222	0 75367		
	0.74456	+++++					0.81708	9 165
112 Biphenyl	1.59191	1.46569	1.26360	1.30632	1 12951	1 00073		
	0 98022	+++++					1 24828	18 390

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Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7	0.20000 Level 8						
111 Azobenzene (1,2-DP-Hydrazine)	1.50472	1.52290	1.38359	1.28229	1.22060	1.07895		
	1.08539	+++++					1.29692	14.079
110 Tetrachloroguaiacol	0.12178	0.13158	0.12582	0.11927	0.11959	0.11443		
	0.11413	+++++					0.12094	5.131
109 3,4,5-Trichloroguaiacol	0.13396	0.14099	0.13006	0.12310	0.12270	0.12585		
	0.11845	+++++					0.12787	6.028
181 3,4,6-Trichloroguaiacol	0.45499	0.54856	0.49140	0.48709	0.49289	0.44217		
	0.47053	+++++					0.48395	7.100
108 4,5,6-Trichloroguaiacol	0.18957	0.20417	0.20302	0.19836	0.19822	0.19129		
	0.20211	+++++					0.19810	2.888
184 3,4-Dichloroguaiacol	0.43079	0.49217	0.46071	0.43827	0.44857	0.42826		
	0.44141	+++++					0.44860	4.930
107 4,5-Dichloroguaiacol	0.26704	0.28817	0.26955	0.26428	0.26098	0.25487		
	0.26119	+++++					0.26658	3.987
182 4,6-Dichloroguaiacol	0.52036	0.59444	0.54121	0.54010	0.54657	0.50560		
	0.52645	+++++					0.53925	5.222
185 4-Chloroguaiacol	0.59761	0.60390	0.55971	0.55490	0.55849	0.54011		
	0.54796	+++++					0.56610	4.357

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Method file : /chem2/nt6.i/20121019.b/SW846101912.m
Cal Date : 22-Oct-2012 10:30 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7	0.20000 Level 8						
106 Guaiacol	1.27777	1.25340	1.09767	1.09960	1.08527	0.99130		
	0.98990	+++++					1.11356	10.239
105 1-methylnaphthalene	0.56604	0.54668	0.47095	0.50460	0.46268	0.43567		
	0.42421	+++++					0.48726	11.098
151 1,2,4,5-Tetrachlorobenzene	0.63020	0.63546	0.56687	0.55708	0.53326	0.52001		
	0.51249	+++++					0.56505	8.870
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

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Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7	0.20000 Level 8						
167 2,2',4,4',5-Pentabromobipheny	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
3 Phenol	2 00347	1 94990	1 78582	1 64261	1.61641	1 49929		
	1.62047	+++++					1.73114	10.859
4 Bis(2-Chloroethyl)ether	1.55714	1 59845	1 38635	1.32531	1 32025	1.20430		
	1.20007	+++++					1 37027	11.473
6 2-Chlorophenol	1.65064	1.62724	1.48696	1.37801	1 37759	1.24482		
	1.27055	+++++					1.43369	11.243
7 1,3-Dichlorobenzene	1 78370	1.87427	1.67104	1 59682	1 54110	1.38677		
	1.39089	+++++					1.60637	11.546
9 1,4-Dichlorobenzene	1 74561	1.85336	1.64840	1 57931	1.54253	1.36226		
	1.35887	+++++					1 58433	11.650
11 Benzyl alcohol	1.20840	1.30489	1.08235	1.19219	1.11581	1.06067		
	1.09144	+++++					1.15082	7.636
12 1,2-Dichlorobenzene	1.73714	1.77192	1 56640	1.49762	1.44533	1.25725		
	1 29265	+++++					1.50976	13.215
13 2-Methylphenol	1.46308	1 52907	1 36443	1.25190	1.27088	1.14979		
	1.12733	+++++					1.30807	11.607

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Curve Type : Average

Compound	1 000 Level 1	5 000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80 000 Level 7	0.20000 Level 8						
14 2,2'-oxybis(1-Chloropropane)	2.22143	2.27673	1.99192	1.87315	1.85232	1 62793		
	1.60779	+++++					1.92161	13.650
15 4-Methylphenol	1.46656	1 57970	1.41825	1 30786	1.31276	1 17858		
	1.17540	+++++					1.34844	11.084
16 N-Nitroso-di-n-propylamine	1 04147	1.14349	0.98744	0 93163	0.93692	0.87681		
	0.87043	+++++					0 96974	10.022
17 Hexachloroethane	0 69566	0.71530	0.63830	0 62255	0.62051	0.56636		
	0 56748	+++++					0 63231	9.067
19 Nitrobenzene	0.47977	0.48320	0 43035	0.40736	0 38486	0.35258		
	0 34977	+++++					0 41256	13.334
20 Isophorone	0 70352	0.74334	0.65093	0 62853	0.59974	0 57061		
	0.56859	+++++					0 63789	10.412
21 2-Nitrophenol	0.19886	0.22033	0.20802	0 20383	0.20549	0 19975		
	0 19996	+++++					0.20518	3 648
22 2,4-Dimethylphenol	0 43051	0 42060	0.38053	0 36101	0 35199	0 32848		
	0.32864	+++++					0 37168	11.067
23 Bis(2-Chloroethoxy)methane	0 51317	0.53465	0 46797	0 44749	0.42842	0 40389		
	0 39383	+++++					0.45563	11 686

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Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10 000 Level 3	25.000 Level 4	40.000 Level 5	60 000 Level 6	RRF	% RSD	
	80 000 Level 7	0.20000 Level 8							
24 Benzoic acid	0 15394	0.23975	0.24856	0.27736	0.28927	0 28870			
	0.29662	+++++					0.25631	19.519	
25 2,4-Dichlorophenol	0.32509	0.34851	0.31949	0 31061	0.30088	0.28248			
	0 27986	+++++					0.30956	7.856	
26 1,2,4-Trichlorobenzene	0.39420	0 40456	0 35537	0 35469	0.33460	0.31859			
	0.31161	+++++					0.35337	10.071	
28 Naphthalene	1 40810	1.41247	1.26231	1.14249	1.02163	0.82844			
	+++++	+++++					1.17924	19.446	
29 4-Chloroaniline	0.66000	0.63104	0.53690	0 52177	0.41312	0.34346			
	0.29579	+++++					0.48601	28.731	<-
30 Hexachlorobutadiene	0.23168	0.24121	0.21425	0.21670	0.20411	0.19576			
	0 19515	+++++					0.21412	8.192	
31 4-Chloro-3-methylphenol	0 29975	0.33603	0 30782	0 30156	0.29850	0.27976			
	0.28407	+++++					0.30107	6.093	
32 2-Methylnaphthalene	0.83364	0.79334	0.67469	0.70512	0.62576	0.55095			
	0.53109	+++++					0 67351	16.992	
33 Hexachlorocyclopentadiene	0.29558	0.40365	0 35569	0 38804	0 38641	0.40812			
	0.38529	+++++					0.37468	10.338	

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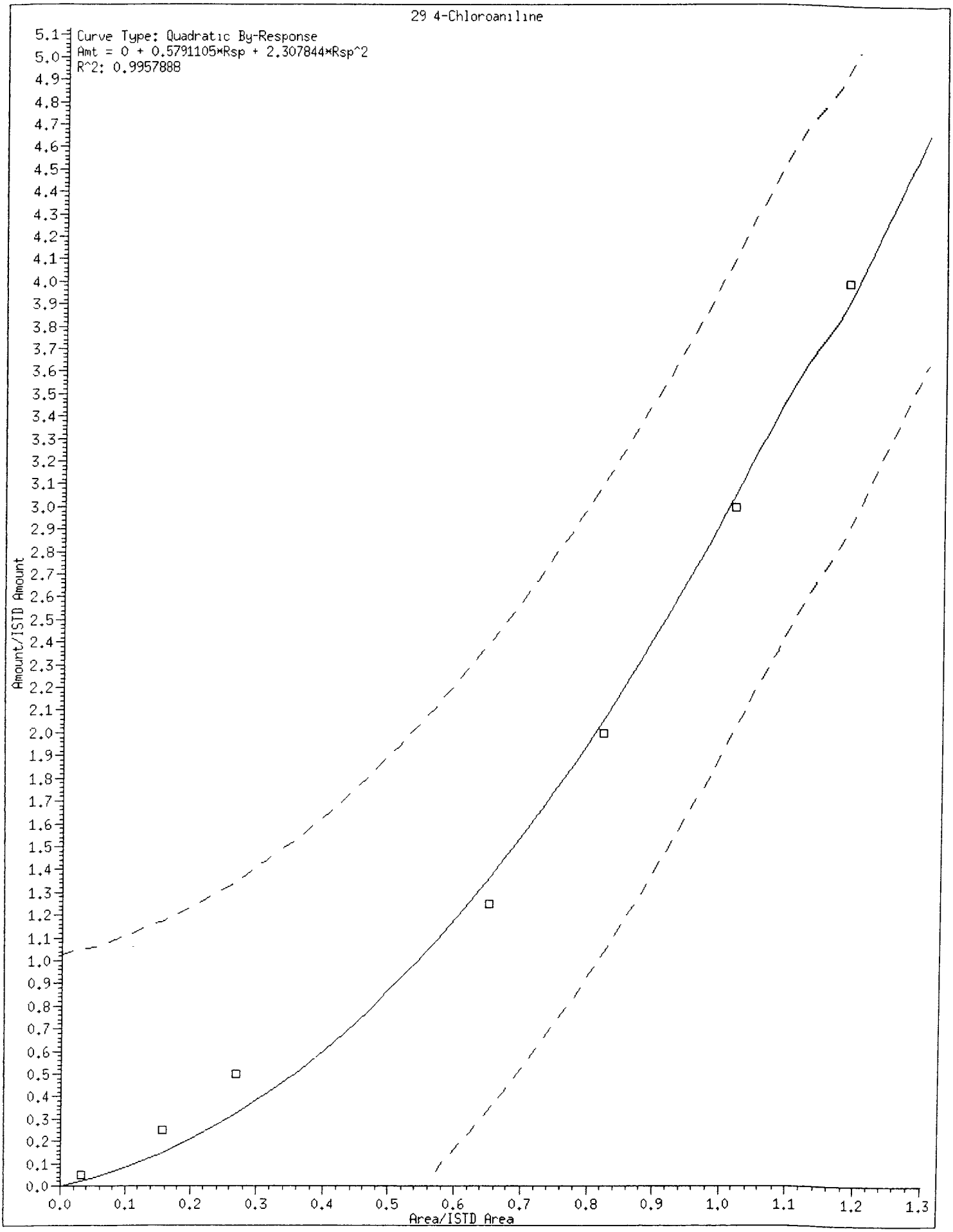
10/22/12

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7	0.2000 Level 8									
22 2,4-Dimethylphenol	0.43051	0.42060	0.38053	0 36101	0 35199	0.32848					
	0.32864	+++++					AVRG		0 37168		11.06718
23 Bis(2-Chloroethoxy)methane	0.51317	0.53465	0 46797	0.44749	0.42842	0.40389					
	0.39383	+++++					AVRG		0 45563		11 68611
24 Benzoic acid	0 15394	0 23975	0 24856	0.27736	0 28927	0.28870					
	0.29662	+++++					AVRG		0.25631		19 51864
25 2,4-Dichlorophenol	0.32509	0.34851	0 31949	0 31061	0 30088	0.28248					
	0 27986	+++++					AVRG		0.30956		7 85584
26 1,2,4-Trichlorobenzene	0.39420	0.40456	0.35537	0.35469	0 33460	0.31859					
	0.31161	+++++					AVRG		0.35337		10.07092
28 Naphthalene	1.40810	1 41247	1 26231	1 14249	1.02163	0.82844					
	+++++	+++++					AVRG		1.17924		19.44608
29 4-Chloroaniline	101039	512508	726453	1694304	2150065	3252887					
	3066871	+++++					QUAD	0.000e+00	0.57911	2 30784	0.99579


29 4-Chloroaniline
Curve Type: Quadratic By-Response
Amt = 0 + 0.5791105*Rsp + 2.307844*Rsp^2
R^2: 0.9957888
Amount/ISTD Amount
Area/ISTD Area

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Curve Type : Average

Compound	1 000 Level 1	5.000 Level 2	10.000 Level 3	25 000 Level 4	40 000 Level 5	60 000 Level 6	RRF	% RSD
	80 000 Level 7	0.20000 Level 8						
34 2,4,6-Trichlorophenol	0.39190	0 40209	0.38954	0.38042	0.37572	0.37068		
	0 37589	+++++					0 38375	2.902
35 2,4,5-Trichlorophenol	0.37405	0.41862	0 40785	0 40992	0.40736	0 40438		
	0 39753	+++++					0.40282	3.517
37 2-Chloronaphthalene	1.38773	1 34389	1 17989	1.09536	1 00192	0 91189		
	0.89224	+++++					1 11613	17.732
38 2-Nitroaniline	0.40900	0 45225	0 40559	0 44530	0.42151	0 41575		
	0.40817	+++++					0.42251	4.454
39 Dimethylphthalate	1.32890	1.41175	1.25971	1.20816	1.15459	1.06959		
	1 09834	+++++					1.21872	10 163
40 Acenaphthylene	2.37324	2 43596	2 15762	1.95632	1.78471	1.51091		
	1.47417	+++++					1.95613	19 851
41 2,6-Dinitrotoluene	0.26367	0 30625	0 28722	0 28999	0.28527	0.27628		
	0.28091	+++++					0.28423	4 599
43 3-Nitroaniline	0 38731	0.42202	0.37108	0.36364	0.28169	+++++		
	+++++	+++++					0.36515	14 183
44 Acenaphthene	1 54033	1.51011	1 34047	1 24004	1.16597	1.02767		
	1.03235	+++++					1 26528	16.530

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Integrator : HP RTE
Method file : /chem2/nt6.i/20121019.b/SW846101912.m
Cal Date : 22-Oct-2012 10:30 jianqing
Curve Type : Average

Compound	1.000 Level 1	5 000 Level 2	10.000 Level 3	25 000 Level 4	40.000 Level 5	60 000 Level 6	RRF	% RSD	
	80 000 Level 7	0.20000 Level 8							
45 2,4-Dinitrophenol	+++++	0.06885	0 09888	0 14075	0.15474	0.16252			
	0 17745	+++++					0.13387	31.080	<-
46 Dibenzofuran	2 38844	2 20180	1.89728	1 94939	1.70326	1 50066			
	1 45466	+++++					1.87078	18.551	
47 4-Nitrophenol	0 14345	0 14212	0.14352	0.15926	0.16023	0.14927			
	0.14634	+++++					0 14917	5.093	
48 2,4-Dinitrotoluene	0.30442	0 39366	0.37950	0.38192	0.37285	0.35603			
	0.37177	+++++					0.36573	8.027	
49 Fluorene	1.64498	1 61408	1 48363	1.37582	1.28273	1.10943			
	1.10535	+++++					1.37372	16.103	
50 Diethylphthalate	1.48850	1 45330	1 31987	1.25333	1.18222	1.05372			
	1.06200	+++++					1 25899	13 796	
51 4-Chlorophenyl-phenylether	0.74822	0.73562	0 66964	0.64234	0 61144	0.56363			
	0 56357	+++++					0 64778	11.587	
52 4-Nitroaniline	0 33133	0.37069	0.34240	0 35113	0.32562	0 31917			
	0.32962	+++++					0 33857	5 230	
53 4,6-Dinitro-2-methylphenol	+++++	0.10677	0.12017	0.13262	0.13902	0 14037			
	0 14286	+++++					0.13030	10 838	

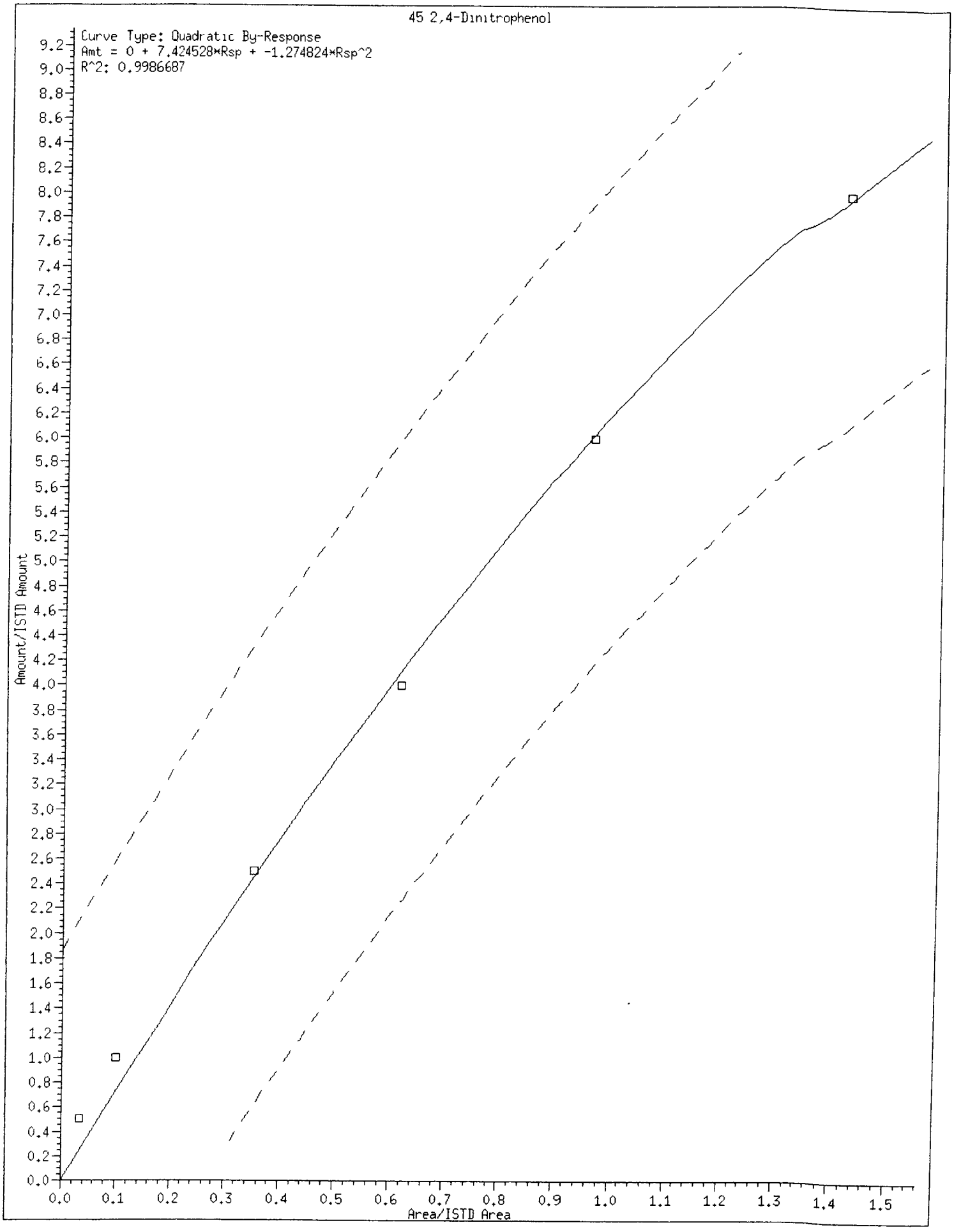
Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2012 16:20
End Cal Date : 19-OCT-2012 20:20
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20121019.b/SW846101912.m
Cal Date : 22-Oct-2012 10:30 jianqing

10/22/12

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7	0.2000 Level 8									
38 2-Nitroaniline	0.40900	0.45225	0.40559	0.44530	0 42151	0.41575					
	0.40817	+++++					AVRG		0 42251		4.45399
39 Dimethylphthalate	1.32890	1.41175	1 25971	1 20816	1 15459	1.06959					
	1 09834	+++++					AVRG		1 21872		10 16253
40 Acenaphthylene	2 37324	2.43596	2.15762	1 95632	1 78471	1 51091					
	1.47417	+++++					AVRG		1.95613		19 85081
41 2,6-Dinitrotoluene	0.26367	0.30625	0.28722	0.28999	0 28527	0 27628					
	0.28091	+++++					AVRG		0 28423		4.59892
43 3-Nitroaniline	0 38731	0.42202	0.37108	0.36364	0.28169	+++++					
	+++++	+++++					AVRG		0 36515		14.18327
44 Acenaphthene	1.54033	1 51011	1.34047	1 24004	1 16597	1.02767					
	1.03235	+++++					AVRG		1.26528		16.53008
45 2,4-Dinitrophenol	+++++	64095	151572	529197	924962	1706717					
	2061033	+++++					QUAD	0.000e+00	7.42453	-1.27482	0.99867


45 2,4-Dinitrophenol
Curve Type: Quadratic By-Response
Amt = 0 + 7.424528*Rsp + -1.274824*Rsp^2
R^2: 0.9986687
Amount/ISTD Amount
Area/ISTD Area

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2012 16:20
End Cal Date : 19-OCT-2012 20:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20121019.b/SW846101912.m
Cal Date : 22-Oct-2012 10:30 jianqing
Curve Type : Average

Compound	1.000 Level 1	5 000 Level 2	10 000 Level 3	25 000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7	0 20000 Level 8						
54 N-Nitrosodiphenylamine	0.70277	0.71660	0 61808	0 59004	0 57506	0.53513		
	0.50572	+++++					0.60620	13 134
56 4-Bromophenyl-phenylether	0 26968	0 27145	0.24913	0.23604	0.23327	0 22839		
	0.21916	+++++					0 24388	8 334
57 Hexachlorobenzene	0 29071	0 28441	0 25414	0.24413	0.23946	0.22941		
	0 22124	+++++					0 25193	10.539
58 Pentachlorophenol	0.10463	0.13581	0.14497	0 15140	0 15677	0.15583		
	0.15766	+++++					0 14387	13 195
60 Phenanthrene	1 46860	1.44656	1.27290	1.15111	1 08999	0.94704		
	0.89130	+++++					1.18107	19.231
61 Anthracene	1 50011	1.47897	1.33604	1.20233	1.12227	0.94876		
	0.89720	+++++					1.21224	19.816
62 Carbazole	1.17720	1.17701	1.05252	0 95004	0 89099	0.79448		
	0.77635	+++++					0.97409	17.149
63 Di-n-butylphthalate	1.42768	1 47652	1.35066	1.21319	1.12964	0.94740		
	0 90899	+++++					1.20772	18.644
64 Fluoranthene	1 48134	1 45513	1.34596	1.26716	1 16959	0.98838		
	0 95945	+++++					1.23814	16 924

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2012 16:20
End Cal Date : 19-OCT-2012 20:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20121019.b/SW846101912.m
Cal Date : 22-Oct-2012 10:56 jianqing
Curve Type : Average

Compound	1 000 Level 1	5 000 Level 2	10.000 Level 3	25.000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80 000 Level 7	0 20000 Level 8						
65 Pyrene	1.64027	1 68864	1.46049	1.34620	1.22034	1.06281		
	+++++	+++++					1.40313	17.268
67 Butylbenzylphthalate	0.57873	0 64004	0.57968	0.56593	0.53581	0.49088		
	0 48160	+++++					0.55324	10.001
68 Benzo(a)anthracene	1.39996	1 40991	1.26823	1.18732	1 10336	1 00414		
	0 94562	+++++					1.18836	15.376
70 3,3'-Dichlorobenzidine	0 40051	0 38926	0 34641	0.34279	0.27535	0.25259		
	+++++	+++++					0.33449	17.825
71 Chrysene	1 42023	1 38834	1.21511	1 16560	1 07504	0.94781		
	0 88891	+++++					1.15729	17.589
72 bis(2-Ethylhexyl)phthalate	0 68992	0 72556	0 64544	0.62412	0 60700	0.56658		
	0 55686	+++++					0.63078	9.792
73 Di-n-octylphthalate	1.24558	1 21987	1 10448	1.04587	0 98745	0.89319		
	0 84715	+++++					1.04908	14.547
74 Benzo(b)fluoranthene	1.23260	1 44777	1 27828	1.18044	1.14016	1.00390		
	1 00578	+++++					1.18414	13.217
75 Benzo(k)fluoranthene	1 50453	1 43401	1 30702	1 28998	1.10732	0 96404		
	0.86133	+++++					1.20975	19 832

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2012 16:20
End Cal Date : 19-OCT-2012 20:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20121019.b/SW846101912.m
Cal Date : 22-Oct-2012 10:30 jianqing
Curve Type : Average

Compound	1.000 Level 1	5 000 Level 2	10.000 Level 3	25 000 Level 4	40 000 Level 5	60.000 Level 6	RRF	% RSD	
	80 000 Level 7	0.20000 Level 8							
76 Benzo(a)pyrene	1.25426	1 30557	1.17832	1.12877	1.04051	0.93436			
	0 89413	+++++					1.10513	14.124	
78 Indeno(1,2,3-cd)pyrene	1 70848	1 77300	1.58336	1.52874	1.41803	1.34995			
	1 30480	+++++					1 52376	11.652	
79 Dibenzo(a,h)anthracene	1.42130	1 47223	1.31391	1 24261	1.14034	1.04170			
	1.00144	+++++					1 23336	14.734	
80 Benzo(g,h,i)perylene	1.50789	1 53835	1 37736	1 32937	1.24922	1.19685			
	1.14624	+++++					1.33504	11.242	
90 N-Nitrosodimethylamine	0.93705	1.01288	0 88653	0.85743	0 87790	0 88465			
	0.86201	+++++					0.90263	6.106	
91 Aniline	2 80846	2.79479	2.34252	2 42886	2.22477	2.11348			
	1.98389	+++++					2.38525	13.381	
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	
93 Benzidine	+++++	0 50955	0.42240	0.37685	0 28463	0.24562			
	0 22558	+++++					0 34410	32.325	<-
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++	+++++					+++++	+++++	

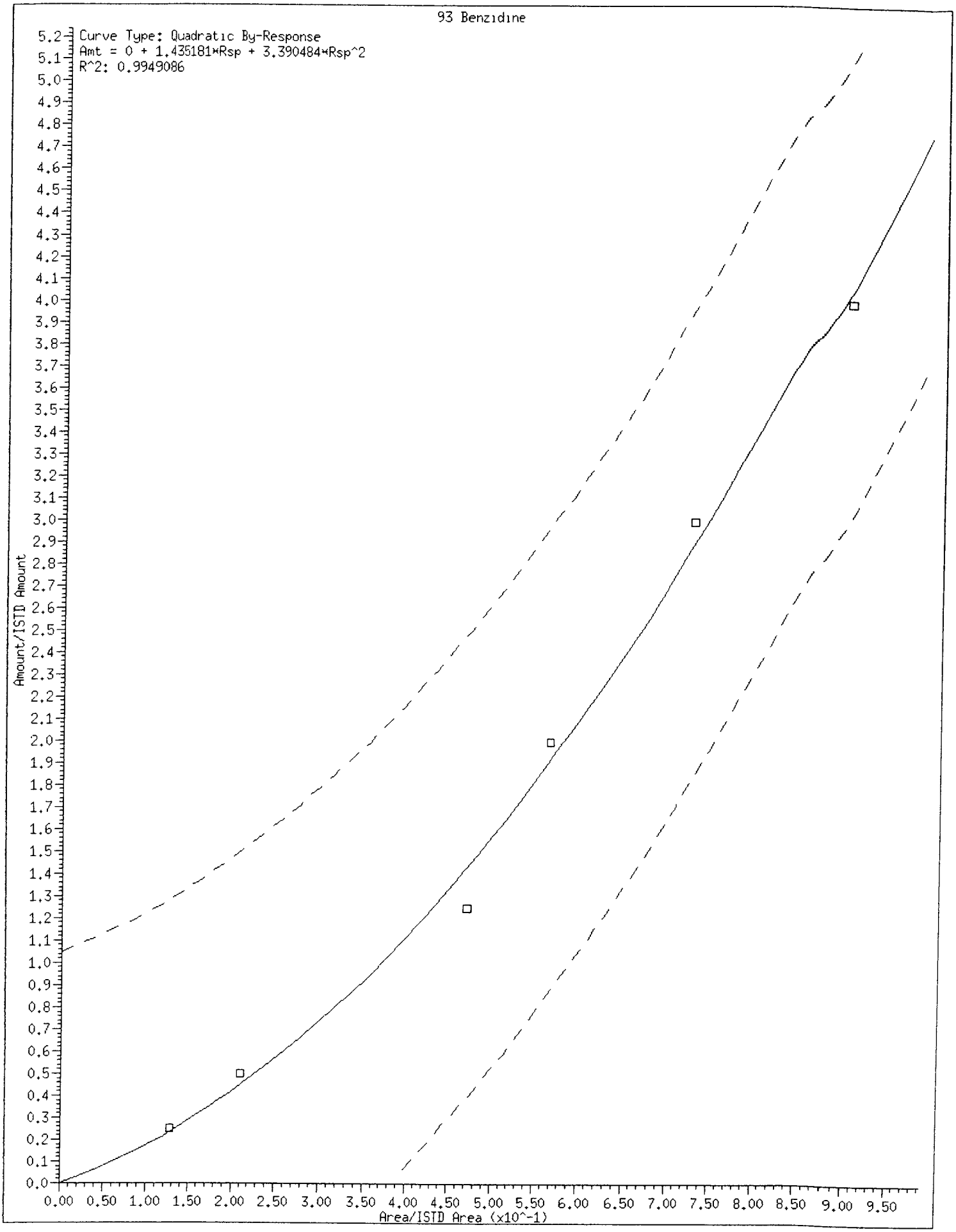
Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2012 16:20
End Cal Date : 19-OCT-2012 20:20
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20121019.b/SW846101912.m
Cal Date : 22-Oct-2012 10:30 jianqing

10/22/12

Compound	1 Level 1	5 Level 2	10 Level 3	25 Level 4	40 Level 5	60 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	80 Level 7	0.2000 Level 8									
79 Dibenzo(a,h)anthracene	1.42130	1.47223	1.31391	1.24261	1 14034	1.04170					
	1 00144	+++++					AVRG		1 23336		14 73363
80 Benzo(g,h,i)perylene	1.50789	1.53835	1.37736	1.32937	1 24922	1.19685					
	1 14624	+++++					AVRG		1.33504		11 24157
90 N-Nitrosodimethylamine	0.93705	1.01288	0.88653	0.85743	0.87790	0.88465					
	0 86201	+++++					AVRG		0 90263		6.10618
91 Aniline	2.80846	2.79479	2.34252	2.42886	2.22477	2 11348					
	1.98389	+++++					AVRG		2.38525		13 38148
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0 000e+00		0 000e+00
93 Benzidine	+++++	318554	481923	1098481	1315452	1879611					
	2118598	+++++					QUAD	0.000e+00	1 43518	3.39048	0 99491
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+00		0 000e+00


93 Benzidine
Curve Type: Quadratic By-Response
Amt = 0 + 1.435181*Rsp + 3.390484*Rsp^2
R^2: 0.9949086
Amount/ISTD Amount
Area/ISTD Area (x10^-1)

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2012 16:20
End Cal Date : 19-OCT-2012 20:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20121019.b/SW846101912.m
Cal Date : 22-Oct-2012 10:30 jianqing
Curve Type : Average

Compound	1.000 Level 1	5.000 Level 2	10 000 Level 3	25 000 Level 4	40.000 Level 5	60.000 Level 6	RRF	% RSD
	80 000 Level 7	0.20000 Level 8						
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
98 Retene	0.57276	0 57096	0.49124	0 50875	0.49461	0.46767		
	0 45241	+++++					0 50834	9 274
99 Perylene	1.03093	0 93861	0.94490	0 90298	0 81804	0.76490		
	+++++	+++++					0.90006	10.614
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
103 Pyridine	1.52307	1 76740	1.53593	1.48313	1.50227	1.49621		
	1.48234	+++++					1 54148	6.589
187 Total Benzofluoranthenes	1 39673	1 37616	1 22774	1 17327	1.05866	0.92556		
	0.88280	+++++					1 14870	17 724
188 2,6-Dichlorophenol	1 00406	1 06399	0.88019	0.91568	0.98067	0.86549		
	0.84572	+++++					0.93654	8.681

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2012 16:20
End Cal Date : 19-OCT-2012 20:20
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20121019.b/SW846101912.m
Cal Date : 22-Oct-2012 10:30 jianqing
Curve Type : Average

Compound	1 000 Level 1	5 000 Level 2	10.000 Level 3	25 000 Level 4	40 000 Level 5	60.000 Level 6	RRF	% RSD
	80.000 Level 7	0.20000 Level 8						
$ 66 Terphenyl-d14	0.87542	0 80850	0.70298	0 70469	0.67220	0.65302		
	+++++	+++++					0.73613	11.799
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 88 Dibenz(a,h)anthracene-d14	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++
$ 95 D10-1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++	+++++					+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 19-OCT-2012 16:20
End Cal Date : 19-OCT-2012 20:20
Quant Method : ISTD
Origin : Force
Target Version : 3.50
Integrator : HP RTE
Method file : /chem2/nt6.i/20121019.b/SW846101912.m
Cal Date : 22-Oct-2012 10:30 jianqing

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

Analytical Resources Inc.: Organics Instrument Log

NT-6 Serial No.:GC=US00036167, MS=US81221575

Date. 10/19/12 Analysis 8270D Analyst [illegible]

GC Program: [illegible] Column No 21+825 Column Type ZB-5MS

Instrument Tune (.U or .CT). 121019 EM Voltage 1953

Calibration File 10912011 Curve Date. 10/19/12 Injection Vol. 1 µl

IS/SS	Ical/Ccal	LCS/ICV
1998-2	~~2001-1~~, 2002-1	1972-2, 1973-2
	~~2003-1~~, ~~2004-1~~	1974-1, ~~2004-1~~
	~~1363~~, 1998-2	~~1363~~, ~~5814-1~~
	~~20272~~, 1998-1	20272, 1999-1

Document All Maintenance Tasks In StarLIMS

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem2/nt6.i/20121019.b

Time	Filename	LabID	ClientId	DF																	
1620	10191201.D	IC251019	IC251019	1	8.15	735905	10.21	2597762	13.09	1503943	15.48	2402003	19.80	2331938	21.97	2485610	20.94	2790605			
1654	10191202.D	IC021019	IC021019	1	8.14	734869	10.20	2608004	13.08	1434222	15.47	2206323	19.80	2218281	21.96	2360716	20.93	2652458			
1728	10191203.D	IC11019	IC11019	1	8.14	873553	10.20	3061780	13.09	1702189	15.47	2587630	19.80	2485012	21.96	2615158	20.93	2978913			
1803	10191204.D	ICS1019	ICS1019	1	8.15	902591	10.20	3248649	13.09	1861891	15.47	2797380	19.80	2500663	21.97	2601675	20.93	2940989			
1837	10191205.D	IC101019	IC101019	1	8.15	764299	10.21	2706123	13.08	1532884	15.47	2359211	19.81	2281812	21.97	2448553	20.93	2747493			
1912	10191206.D	IC401019	IC401019	1	8.15	713803	10.21	2602197	13.09	1494348	15.47	2346191	19.81	2310828	21.97	2481608	20.93	2715395			
1946	10191207.D	IC601019	IC601019	1	8.15	884875	10.21	3156975	13.09	1750239	15.48	2668096	19.81	2550867	21.98	2755440	20.93	2892143			
2020	10191208.D	IC801019	IC801019	1	8.15	720309	10.21	2592116	13.09	1451817	15.48	2366869	19.82	2347949	21.98	2479241	20.94	2627804			
2054	10191209.D	ICV1019	ICV1019	1	8.15	678360	10.21	2415842	13.09	1364949	15.48	2122745	19.80	2132526	21.97	2270897	20.94	2496927			

10/22/12

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/nt6.i/20121019.b

ARI Job No.: IC25 Method: SW846101912.m Instrument: nt6.i Date: 19-OCT-2012

10/22/12

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1620	10191201 D	IC251019	IC251019	1	NO MANUAL INTEGRATION
1654	10191202 D	IC021019	IC021019	1	NO MANUAL INTEGRATION
1728	10191203.D	IC11019	IC11019	1	3-Nitroaniline,
1803	10191204.D	IC51019	IC51019	1	Total Benzofluoranthenes,
1837	10191205.D	IC101019	IC101019	1	Benzidine,
1912	10191206 D	IC401019	IC401019	1	NO MANUAL INTEGRATION
1946	10191207.D	IC601019	IC601019	1	NO MANUAL INTEGRATION
2020	10191208 D	IC801019	IC801019	1	Benzoic acid,
2054	10191209 D	ICV1019	ICV1019	1	NO MANUAL INTEGRATION

Data File: /chem2/nt6.1/20121019.b/tune.b/10191201.D

Date : 19-OCT-2012 16:20

Client ID: DFTPP1019

Instrument: nt6.1

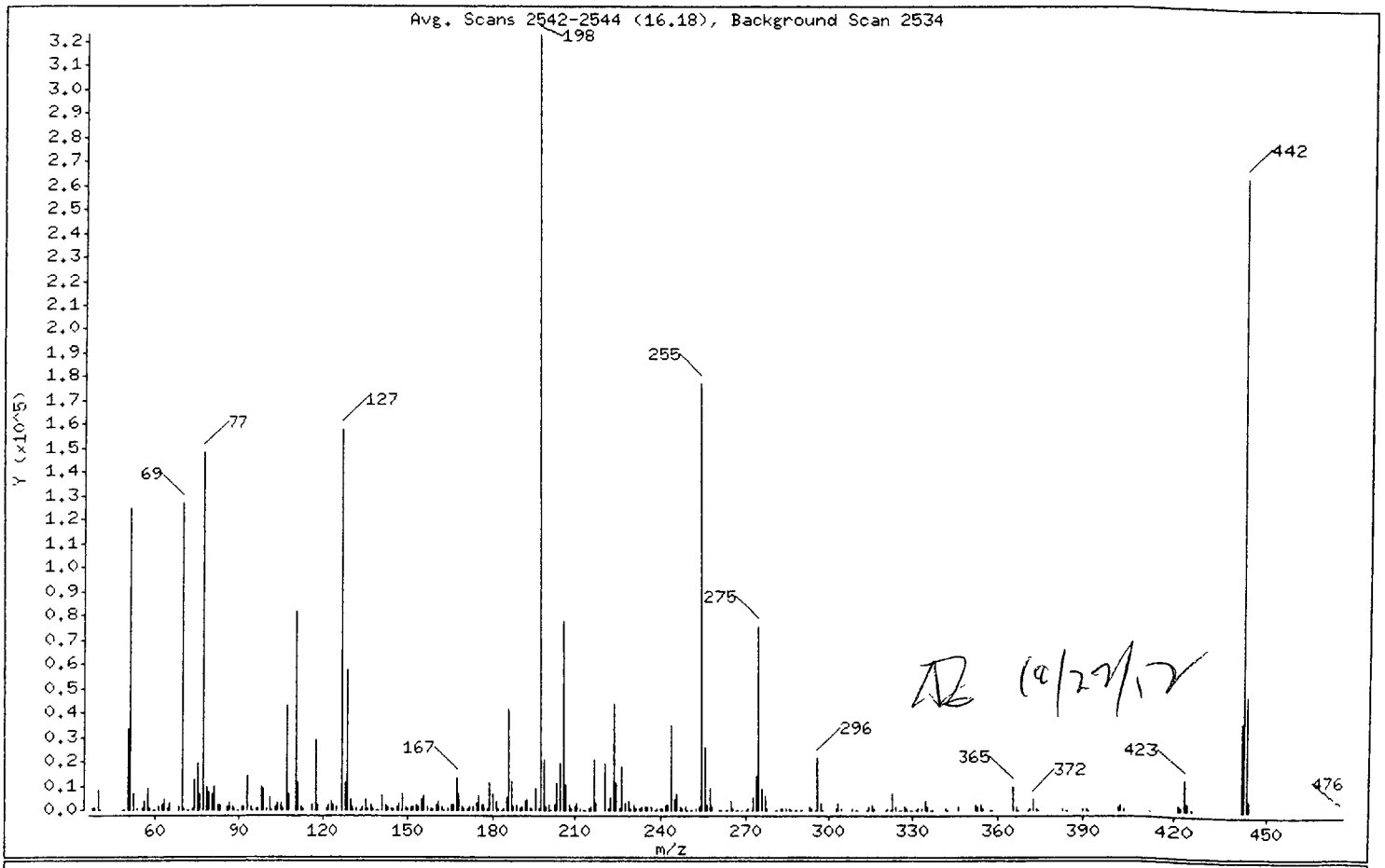
Sample Info: DFTPP1019

Operator: JZ

Column phase: ZB-5ms1

Column diameter: 0.32

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	38.62
68	Less than 2.00% of mass 69	0.41 (1.04)
69	Mass 69 relative abundance	39.29
70	Less than 2.00% of mass 69	0.31 (0.79)
127	10.00 - 80.00% of mass 198	49.07
197	Less than 2.00% of mass 198	0.17
199	5.00 - 9.00% of mass 198	6.48
275	10.00 - 60.00% of mass 198	23.35
365	Greater than 1.00% of mass 198	2.98
441	0.01 - 24.00% of mass 442	11.16 (13.64)
442	50.00 - 200.00% of mass 198	81.86
443	15.00 - 24.00% of mass 442	14.69 (17.94)

Data File: /chem2/nt6.1/20121019.b/tune.b/10191201.D

Date : 19-OCT-2012 16:20

Client ID: DFTPP1019 Instrument: nt6.1

Sample Info: DFTPP1019

Operator: JZ

Column phase: ZB-5ms1 Column diameter: 0.32

Data File: 10191201.D

Spectrum: Avg. Scans 2542-2544 (16.18), Background Scan 2534

Location of Maximum: 198.00

Number of points: 332

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	447	132.00	484	216.00	1496	303.00	2847
38.00	1064	133.00	289	217.00	21120	304.00	548
39.00	8521	134.00	1399	218.00	2969	306.00	50
40.00	184	135.00	4823	219.00	284	308.00	387
41.00	281	136.00	1045	221.00	18936	309.00	150
45.00	265	137.00	2136	222.00	624	310.00	288
48.00	142	138.00	805	223.00	4865	313.00	180
49.00	74	139.00	46	224.00	44000	314.00	1128
50.00	33176	140.00	210	225.00	11018	315.00	2284
51.00	124664	141.00	6156	226.00	890	316.00	1049
52.00	6528	142.00	2252	227.00	18064	317.00	203
53.00	446	143.00	1652	228.00	2719	320.00	183
55.00	819	144.00	495	229.00	3358	321.00	613
56.00	3591	145.00	554	230.00	843	322.00	298
57.00	9161	146.00	1466	231.00	2182	323.00	6845
58.00	587	147.00	3278	232.00	427	324.00	1442
59.00	57	148.00	6962	233.00	649	325.00	175
60.00	187	149.00	1794	234.00	1297	326.00	275
61.00	1544	150.00	413	235.00	1254	327.00	1284
62.00	2177	151.00	1233	236.00	1545	328.00	864
63.00	4410	152.00	1206	237.00	1667	329.00	315
64.00	654	153.00	1965	238.00	229	330.00	67
65.00	2920	154.00	1590	239.00	864	331.00	79
66.00	277	155.00	4285	240.00	692	332.00	394
68.00	1316	156.00	5833	241.00	996	333.00	753
69.00	126824	157.00	1119	242.00	2117	334.00	3739
70.00	1001	158.00	1111	243.00	2515	335.00	1202
71.00	140	159.00	984	244.00	34880	336.00	99
72.00	227	160.00	1916	245.00	4230	337.00	153
73.00	887	161.00	3914	246.00	7026	339.00	182
74.00	12445	162.00	1224	247.00	1587	341.00	602
75.00	19440	163.00	329	248.00	404	342.00	303
76.00	6906	164.00	449	249.00	1283	346.00	1611
77.00	148288	165.00	2058	250.00	303	347.00	254
78.00	9626	166.00	2107	251.00	180	351.00	143

Data File: /chem2/nt6.1/20121019.b/tune.b/10191201.D

Date : 19-OCT-2012 16:20

Client ID: DFTPP1019 Instrument: nt6.1

Sample Info: DFTPP1019

Operator: JZ

Column phase: ZB-5ms1 Column diameter: 0.32

Data File: 10191201.D
Spectrum: Avg. Scans 2542-2544 (16.18), Background Scan 2534
Location of Maximum: 198.00
Number of points: 332

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	7642	167.00	13091	252.00	290	352.00	2308
80.00	6515	168.00	6338	253.00	1017	353.00	1419
81.00	9674	169.00	1164	254.00	1131	354.00	1931
82.00	2209	170.00	816	255.00	177600	355.00	577
83.00	2179	171.00	869	256.00	25736	357.00	233
84.00	286	172.00	1158	257.00	2201	358.00	120
85.00	1407	173.00	1713	258.00	8588	361.00	118
86.00	2850	174.00	2839	259.00	1390	365.00	9612
87.00	1308	175.00	6217	260.00	39	366.00	1464
88.00	489	176.00	2155	261.00	265	367.00	77
89.00	197	177.00	2308	262.00	113	370.00	188
90.00	73	178.00	1015	263.00	265	371.00	431
91.00	1785	179.00	10877	264.00	19	372.00	4497
92.00	1777	180.00	7045	265.00	3595	373.00	652
93.00	14151	181.00	3908	266.00	660	374.00	186
94.00	1520	182.00	1094	267.00	213	377.00	181
95.00	238	183.00	257	268.00	362	383.00	1013
96.00	821	184.00	948	269.00	54	384.00	341
97.00	422	185.00	5065	270.00	351	385.00	53
98.00	9951	186.00	41928	271.00	441	390.00	518
99.00	9167	187.00	11740	272.00	133	391.00	497
100.00	851	188.00	1355	273.00	5196	392.00	156
101.00	5401	189.00	2105	274.00	14305	396.00	60
102.00	328	190.00	408	275.00	75376	397.00	75
103.00	1365	191.00	1234	276.00	9094	401.00	197
104.00	3187	192.00	3994	277.00	5737	402.00	1543
105.00	2752	193.00	4259	278.00	1014	403.00	2319
106.00	739	194.00	745	279.00	351	404.00	812
107.00	43360	195.00	429	281.00	77	405.00	148
108.00	6885	196.00	9169	282.00	280	410.00	69
110.00	81448	197.00	542	283.00	1021	413.00	64
111.00	11168	198.00	322816	284.00	655	415.00	56
112.00	1661	199.00	20920	285.00	1086	421.00	2021
113.00	650	200.00	1691	286.00	409	422.00	1826
114.00	50	201.00	1883	287.00	77	423.00	12523

Data File: /chem2/nt6.i/20121019.b/tune.b/10191201.D

Date : 19-OCT-2012 16:20

Client ID: DFTPP1019

Instrument: nt6.i

Sample Info: DFTPP1019

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 10191201.D

Spectrum: Avg. Scans 2542-2544 (16,18), Background Scan 2534

Location of Maximum: 198.00

Number of points: 332

m/z	Y	m/z	Y	m/z	Y	m/z	Y
116.00	2214	202.00	175	288.00	63	424.00	2632
117.00	29096	203.00	1957	289.00	255	425.00	393
118.00	1960	204.00	11201	290.00	127	431.00	57
120.00	284	205.00	19352	291.00	59	438.00	60
121.00	377	206.00	78240	292.00	264	441.00	36040
122.00	2277	207.00	10351	293.00	1536	442.00	264256
123.00	3993	208.00	2274	294.00	434	443.00	47416
124.00	1928	209.00	883	295.00	88	444.00	4310
125.00	1674	210.00	1588	296.00	21232	445.00	301
127.00	158400	211.00	2848	297.00	2717	476.00	55
128.00	11313	212.00	433	298.00	275		
129.00	57560	213.00	15	299.00	56		
130.00	4743	214.00	118	301.00	296		
131.00	1183	215.00	815	302.00	407		

Data File: /chem2/nt6.1/20121019.b/tune.b/10191201.D

Date : 19-OCT-2012 16:20

Client ID: DFTPP1019

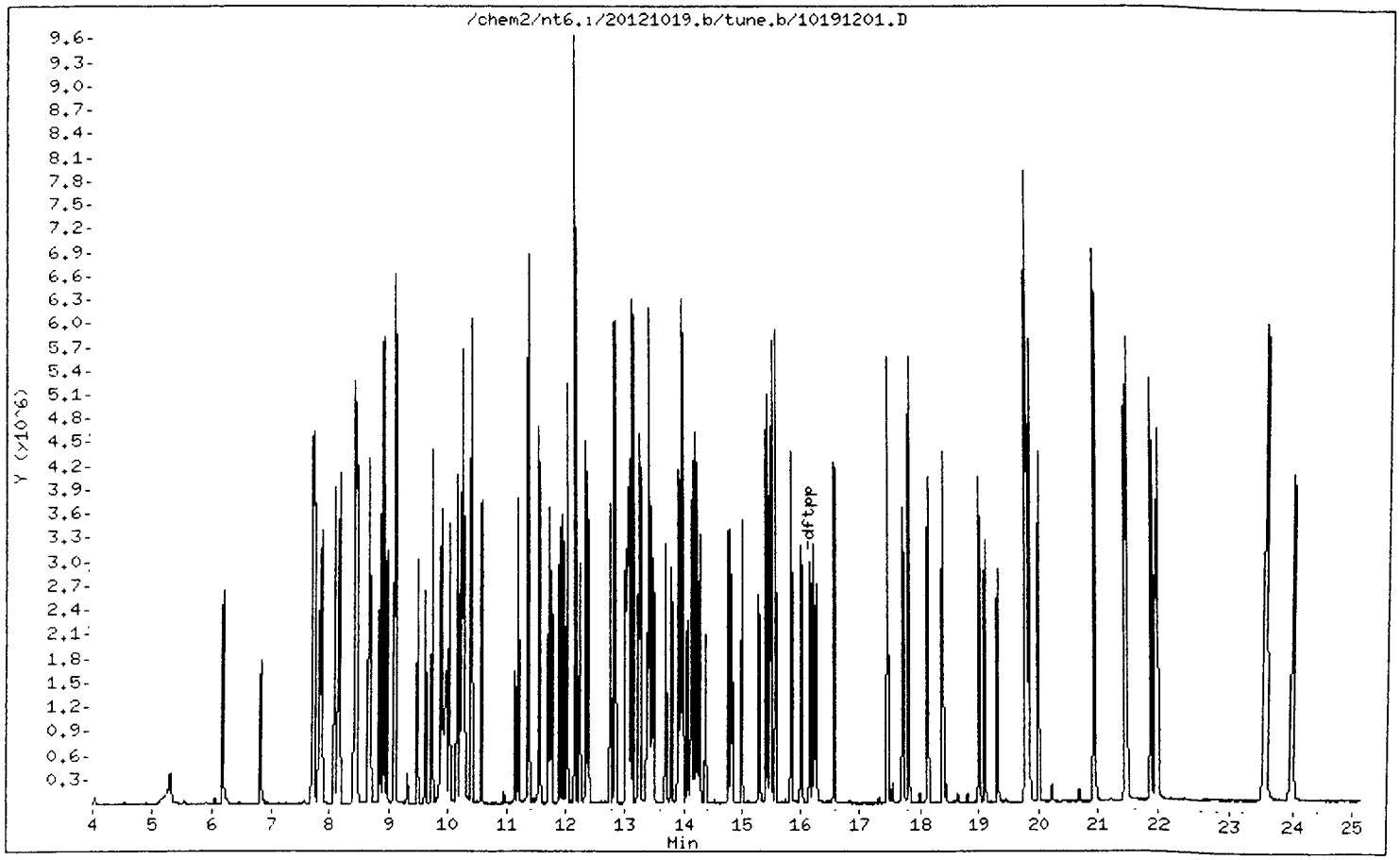
Instrument: nt6.1

Sample Info: DFTPP1019

Operator: JZ

Column phase: ZB-5ms1

Column diameter: 0.32



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem2/nt6.i/20121019.b/ddt.b/10191201.D ARI ID: DDT1019
Method: /chem2/nt6.i/20121019.b/ddt.b/sw846ddt.m Misc: 12-
Analysis Date: 19-OCT-2012 16:20 Instrument: nt6.i

COMPOUND	RT	AREA
Pentachlorophenol	15.289	454578
Benzidine	17.698	1098481
4,4'-DDE	----	----
4,4'-DDD	18.633	35171
4,4'-DDT	19.108	1031807

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

$$\text{DDT Percent Breakdown} = \frac{(0 + 35171) * 100}{(0 + 35171 + 1031807)}$$

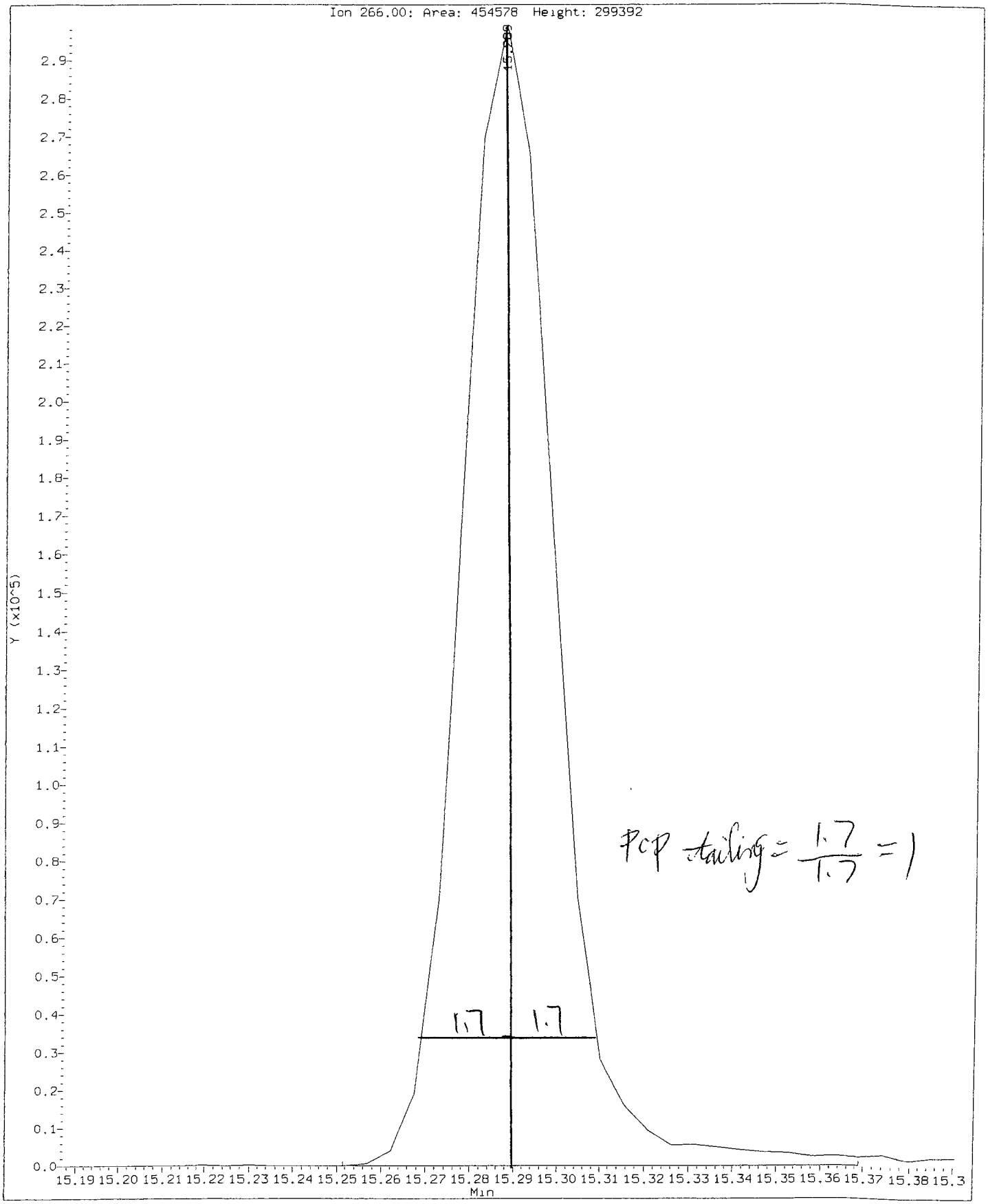
DDT Percent Breakdown = 3.3 %

ok

10/22/12

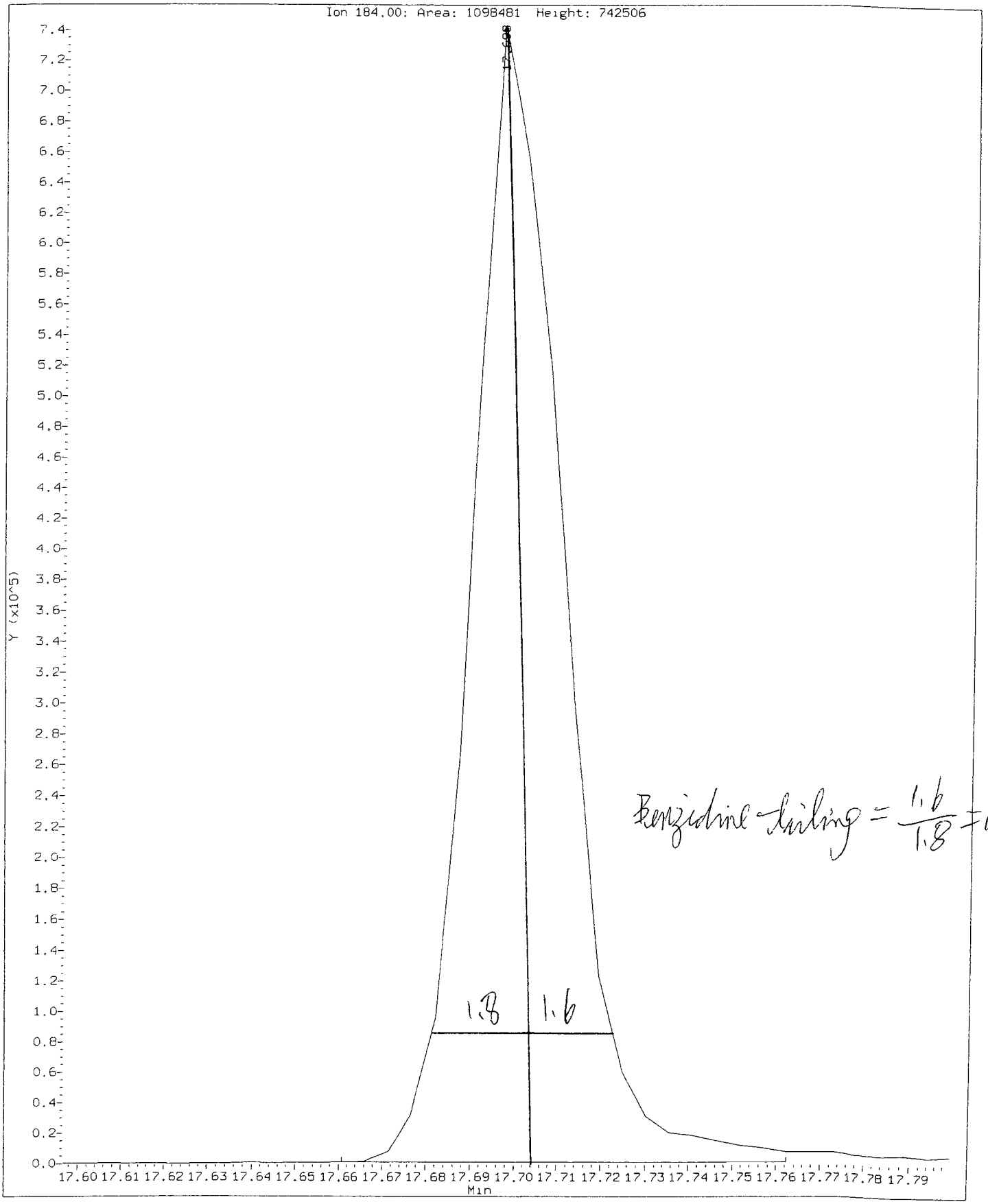
Data File: /chem2/nt6.i/20121019.b/ddt.b/10191201.D
Injection Date: 19-OCT-2012 16:20
Instrument: nt6.i
Client Sample ID: DDT1019

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem2/nt6.1/20121019.b/ddt.b/10191201.D
Injection Date: 19-OCT-2012 16:20
Instrument: nt6.1
Client Sample ID: DDT1019

Compound: Benzidine
CAS Number:



Benzidine tailing = $\frac{1.6}{1.8} = 0.89$

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121019.b/10191202.D
Lab Smp Id: IC021019 Client Smp ID: IC021019
Inj Date : 19-OCT-2012 16:54
Operator : JZ Inst ID: nt6.i
Smp Info : IC021019,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem2/nt6.i/20121019.b/SW846101912.m
Meth Date : 22-Oct-2012 10:34 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 16:54 Cal File: 10191202.D
Als bottle: 2 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALL.sub
Target Version: 3.50

JZ 10/22/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 1	2-Fluorophenol	112	Compound Not Detected					
$ 2	Phenol-d5	99	Compound Not Detected					
3	Phenol	94	Compound Not Detected.					
$ 5	2-Chlorophenol-d4	132	Compound Not Detected.					
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected					
6	2-Chlorophenol	128	Compound Not Detected					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	8.144	8.150	(1.000)	734869	20.0000	
9	1,4-Dichlorobenzene	146	Compound Not Detected					
$ 10	1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	Compound Not Detected					
11	Benzyl alcohol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	Compound Not Detected.					
	19 Nitrobenzene	77	Compound Not Detected					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	10 201	10.212	(1 000)	2608004	20.0000	
	28 Naphthalene	128	Compound Not Detected.					
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	141	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	Compound Not Detected.					
	37 2-Chloronaphthalene	162	Compound Not Detected					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	13 080	13.091	(1 000)	1434222	20.0000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	Compound Not Detected.					
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	Compound Not Detected.					
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	Compound Not Detected.					
	49 Fluorene	166	Compound Not Detected.					
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	Compound Not Detected.					
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	15 468	15.479	(1 000)	2206323	20 0000	
	60 Phenanthrene	178	Compound Not Detected.					
	61 Anthracene	178	Compound Not Detected.					
	62 Carbazole	167	Compound Not Detected					
	63 Di-n-butylphthalate	149	Compound Not Detected					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
	64 Fluoranthene	202	Compound Not Detected.					
	65 Pyrene	202	Compound Not Detected.					
$	66 Terphenyl-d14	244	Compound Not Detected					
	67 Butylbenzylphthalate	149	Compound Not Detected					
	68 Benzo(a)anthracene	228	Compound Not Detected					
*	69 Chrysene-d12	240	19.800	19.817	(1.000)	2218281	20 0000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected					
	71 Chrysene	228	Compound Not Detected					
	72 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected					
*	134 Di-n-octylphthalate-d4	153	20 933	20.939	(1 000)	2652458	20 0000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	Compound Not Detected					
	75 Benzo(k)fluoranthene	252	Compound Not Detected					
	187 Total Benzofluoranthenes	252	Compound Not Detected					
	76 Benzo(a)pyrene	252	Compound Not Detected.					
*	77 Perylene-d12	264	21.964	21 975	(1.000)	2360716	20 0000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected					
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	Compound Not Detected					
	103 Pyridine	79	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	105 1-methylnaphthalene	141	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected					
	143 1,4-Dioxane	88	2.759	2.792	(0.339)	5154	0.20000	0 2140
$	137 d8-1,4-Dioxane	96	Compound Not Detected.					
	144 alpha-Terpineol	59	Compound Not Detected.					
	177 p-Benzoquinone	82	Compound Not Detected.					
	98 Retene	219	Compound Not Detected.					
	99 Perylene	252	Compound Not Detected.					
	133 Butylatedhydroxytoluene	205	Compound Not Detected					
	115 Tributyl Phosphate	99	Compound Not Detected.					
	116 Dibutyl Phenyl Phosphate	175	Compound Not Detected					
	117 Butyl Diphenyl Phosphate	94	Compound Not Detected.					
	118 Triphenyl Phosphate	326	Compound Not Detected.					
	123 Acetophenone	105	Compound Not Detected.					
	168 Pentachlorobenzene	250	Compound Not Detected.					
	113 Diphenyl Oxide	170	Compound Not Detected.					
	112 Biphenyl	154	Compound Not Detected.					
	120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					
	151 1,2,4,5-Tetrachlorobenzene	216	Compound Not Detected.					
	110 Tetrachloroguaiacol	247	Compound Not Detected					
	109 3,4,5-Trichloroguaiacol	213	Compound Not Detected.					
	181 3,4,6-Trichloroguaiacol	211	Compound Not Detected					
	108 4,5,6-Trichloroguaiacol	213	Compound Not Detected.					
	184 3,4-Dichloroguaiacol	192	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
107	4,5-Dichloroguaiacol	192	Compound Not Detected					
182	4,6-Dichloroguaiacol	192	Compound Not Detected.					
185	4-Chloroguaiacol	115	Compound Not Detected					
186	Carbaryl	144	Compound Not Detected.					
178	2-Benzyl-4-Chlorophenol	218	Compound Not Detected					
106	Guaiacol	124	Compound Not Detected					
189	N-Nitrosomethylethylamine	88	Compound Not Detected					
188	2,6-Dichlorophenol	162	Compound Not Detected					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 10191202.D
Lab Smp Id: IC021019
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Misc Info: 12-

Calibration Date: 19-OCT-2012
Calibration Time: 16:20
Client Smp ID: IC021019
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

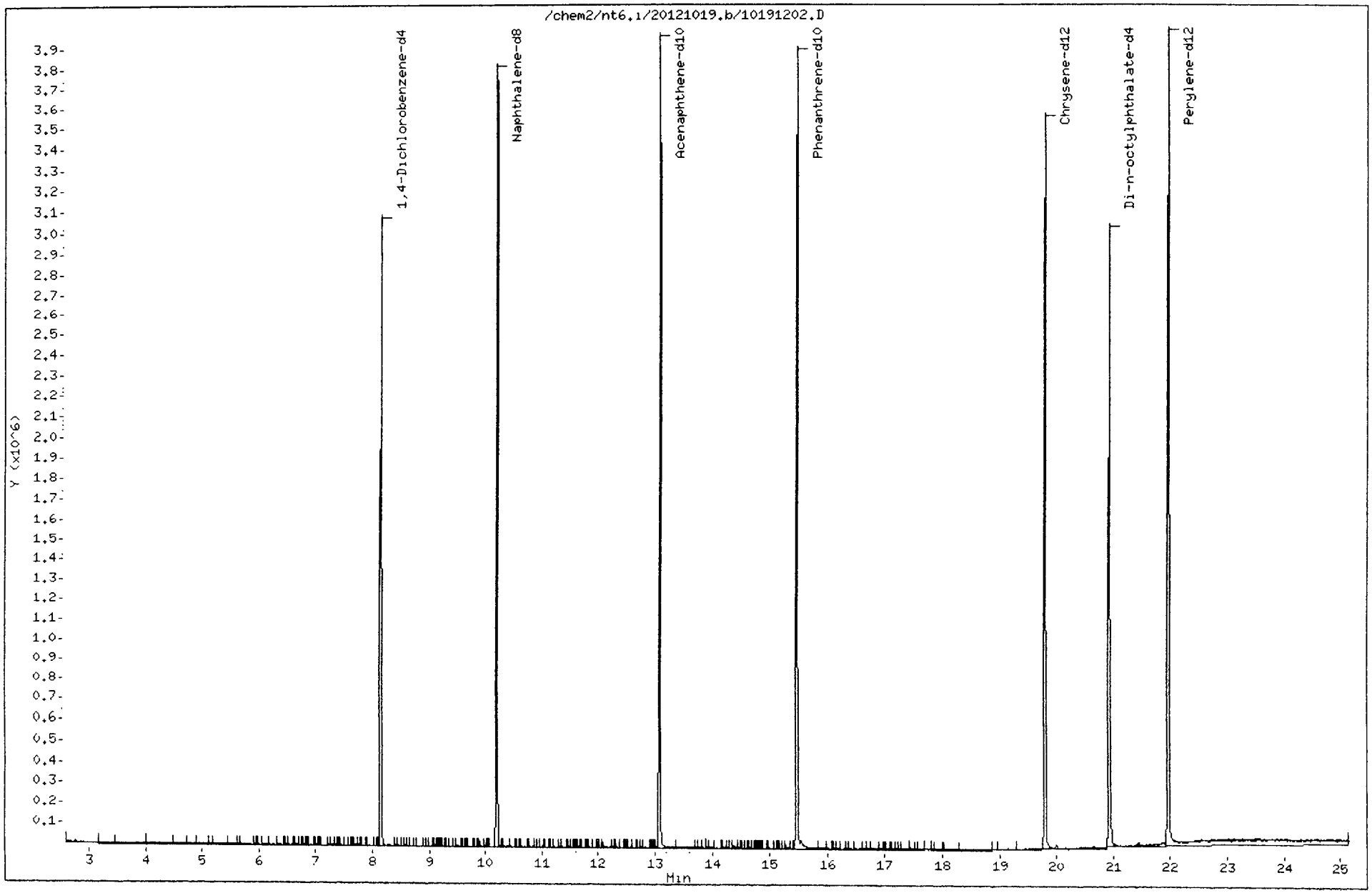
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	734869	-0.14
27 Naphthalene-d8	2597762	1298881	5195524	2608004	0.39
42 Acenaphthene-d10	1503943	751972	3007886	1434222	-4.64
59 Phenanthrene-d10	2402003	1201002	4804006	2206323	-8.15
69 Chrysene-d12	2331938	1165969	4663876	2218281	-4.87
134 Di-n-octylphthala	2790605	1395302	5581210	2652458	-4.95
77 Perylene-d12	2485610	1242805	4971220	2360716	-5.02

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.15	7.65	8.65	8.14	-0.03
27 Naphthalene-d8	10.21	9.71	10.71	10.20	-0.08
42 Acenaphthene-d10	13.09	12.59	13.59	13.08	-0.06
59 Phenanthrene-d10	15.48	14.98	15.98	15.47	-0.05
69 Chrysene-d12	19.80	19.30	20.30	19.80	-0.01
134 Di-n-octylphthala	20.94	20.44	21.44	20.93	-0.01
77 Perylene-d12	21.97	21.47	22.47	21.96	-0.04

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

Data File: /chem2/nt6.1/20121019.b/10191202.D
Date : 19-OCT-2012 16:54
Client ID: IC021019
Sample Info: IC021019,
Volume Injected (uL): 1.0
Column phase: ZB-5ms1

Instrument: nt6.1
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 10191202.D

Lab ID: IC021019, Method: SW846101912.m, Instrument: nt6.i, Date: 19-OCT-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121019.b/10191203.D
Lab Smp Id: IC11019 Client Smp ID: IC11019
Inj Date : 19-OCT-2012 17:28
Operator : JZ Inst ID: nt6.i
Smp Info : IC11019,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem2/nt6.i/20121019.b/SW846101912.m
Meth Date : 22-Oct-2012 10:34 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 17:28 Cal File: 10191203.D
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

10/22/12

AMOUNTS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1 2-Fluorophenol	112	6.173	6 179	(0.758)	68092	1.00000	1.099
$ 2 Phenol-d5	99	7 707	7 877	(0 946)	81437	1.00000	1.088
3 Phenol	94	7.723	7.744	(0 948)	87507	1.00000	1.099
$ 5 2-Chlorophenol-d4	132	7 840	7.861	(0.963)	67400	1.00000	1.083
4 Bis(2-Chloroethyl)ether	93	7.813	7.824	(0.959)	68012	1.00000	1.080
6 2-Chlorophenol	128	7 867	7 877	(0.966)	72096	1.00000	1 090
7 1,3-Dichlorobenzene	146	8 081	8 091	(0 992)	77908	1.00000	1.055
* 8 1,4-Dichlorobenzene-d4	152	8 145	8.150	(1.000)	873553	20.0000	
9 1,4-Dichlorobenzene	146	8.171	8 177	(1.003)	76244	1.00000	1.050
$ 10 1,2-Dichlorobenzene-d4	152	8.449	8 150	(1.037)	52288	1.00000	1 119
12 1,2-Dichlorobenzene	146	8.465	8.476	(1.039)	75874	1.00000	1.074
11 Benzyl alcohol	108	8.422	8 449	(1 034)	52780	1.00000	1.007
14 2,2'-oxybis(1-Chloropropane)	45	8.690	8.700	(1 067)	97027	1.00000	1.085
13 2-Methylphenol	108	8.663	8 684	(1 064)	63904	1 00000	1.078
17 Hexachloroethane	117	8.957	8 967	(1.100)	30385	1.00000	1.055
16 N-Nitroso-di-n-propylamine	70	8.903	8 930	(1 093)	45489	1 00000	1.056
15 4-Methylphenol	108	8 893	8.919	(1.092)	64056	1.00000	1.057
$ 18 Nitrobenzene-d5	82	9.079	9 517	(0.890)	71235	1.00000	1.058
19 Nitrobenzene	77	9.106	9.122	(0.893)	73448	1.00000	1.082
20 Isophorone	82	9 491	9.517	(0.930)	107701	1 00000	1.056
21 2-Nitrophenol	139	9.630	9.640	(0.944)	30444	1.00000	0.9877
22 2,4-Dimethylphenol	107	9.737	9 758	(0.954)	65906	1.00000	1.088
23 Bis(2-Chloroethoxy)methane	93	9 886	9 902	(0.969)	78560	1.00000	1.068
24 Benzoic acid	105	9.849	10.100	(0 965)	47133	2.00000	1.428
25 2,4-Dichlorophenol	162	10.014	10.030	(0 982)	49767	1.00000	1.023
26 1,2,4-Trichlorobenzene	180	10 143	10 159	(0.994)	60347	1.00000	1.053
* 27 Naphthalene-d8	136	10 201	10 212	(1 000)	3061780	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10 233	10 249	(1.003)	215564	1.00000	1.104
	29 4-Chloroaniline	127	10 378	10.394	(1.017)	101039	1.00000	1.117
	30 Hexachlorobutadiene	225	10.559	10.565	(1.035)	35468	1.00000	1.033
	31 4-Chloro-3-methylphenol	107	11.190	11.206	(1.097)	45889	1.00000	0.9970
	32 2-Methylnaphthalene	141	11.361	11.377	(1.114)	127621	1.00000	1.084
	33 Hexachlorocyclopentadiene	237	11.745	11.756	(0.898)	25157	1.00000	0.8648
	34 2,4,6-Trichlorophenol	196	11.879	11 889	(0 908)	33354	1.00000	1.015
	35 2,4,5-Trichlorophenol	196	11 938	11.948	(0 912)	31835	1.00000	0.9542
$	36 2-Fluorobiphenyl	172	12 007	11 954	(0.918)	137465	1.00000	1.119
	37 2-Chloronaphthalene	162	12.146	12 162	(0 928)	118109	1 00000	1 118
	38 2-Nitroaniline	65	12.376	12.397	(0 946)	34810	1 00000	0 9575
	39 Dimethylphthalate	163	12 750	12 776	(0.974)	113102	1 00000	1.048
	40 Acenaphthylene	152	12.830	12 840	(0 980)	201985	1.00000	1.096
	41 2,6-Dinitrotoluene	165	12.840	12 867	(0 981)	22441	1.00000	0.9525
*	42 Acenaphthene-d10	164	13.086	13 091	(1.000)	1702189	20 0000	
	43 3-Nitroaniline	138	13.054	13 081	(0.998)	32964	1.00000	1.032 (M)
	44 Acenaphthene	153	13.134	13 150	(1.004)	131097	1.00000	1 108
	45 2,4-Dinitrophenol	184	13.220	13 252	(1 010)	2361	2.00000	0.1971
	46 Dibenzofuran	168	13.396	13 417	(1 024)	203279	1.00000	1.101
	47 4-Nitrophenol	109	13.364	13 391	(1 021)	12209	1 00000	0.9478
	48 2,4-Dinitrotoluene	165	13.471	13.503	(1 029)	25909	1.00000	0 8871
	50 Diethylphthalate	149	13.909	13 930	(1 063)	126685	1.00000	1.086
	49 Fluorene	166	13.957	13.973	(1.067)	140003	1.00000	1 089
	51 4-Chlorophenyl-phenylether	204	13 978	13 989	(1.068)	63681	1.00000	1.076
	52 4-Nitroaniline	138	14.053	14.096	(1 074)	28199	1.00000	0 9710
	53 4,6-Dinitro-2-methylphenol	198	14.128	14.165	(0 913)	14779	2.00000	0.8613
	54 N-Nitrosodiphenylamine	169	14.181	14.203	(0.917)	90926	1.00000	1.087
$	55 2,4,6-Tribromophenol	330	14.384	14 395	(1.099)	13881	1.00000	0.9711
	56 4-Bromophenyl-phenylether	248	14.764	14.774	(0.954)	34892	1.00000	1.067
	57 Hexachlorobenzene	284	14.988	14.999	(0 969)	37612	1.00000	1.087
	58 Pentachlorophenol	266	15 287	15 298	(0.988)	13537	1 00000	0.8173
*	59 Phenanthrene-d10	188	15.469	15.479	(1.000)	2587630	20.0000	
	60 Phenanthrene	178	15.506	15 522	(1 002)	190010	1.00000	1.121
	61 Anthracene	178	15.576	15.597	(1.007)	194087	1.00000	1.110
	62 Carbazole	167	15.859	15 875	(1 025)	152308	1.00000	1.107
	63 Di-n-butylphthalate	149	16.580	16 585	(1.072)	184715	1.00000	1.081
	64 Fluoranthene	202	17.451	17.467	(1 128)	191658	1.00000	1 078
	65 Pyrene	202	17.809	17 825	(0.899)	203804	1.00000	1 098
$	66 Terphenyl-d14	244	18.124	18 124	(0 915)	108771	1.00000	1.108
	67 Butylbenzylphthalate	149	19.005	19 016	(0.960)	71907	1 00000	1.011
	68 Benzo(a)anthracene	228	19.774	19 796	(0 999)	173946	1.00000	1 082
*	69 Chrysene-d12	240	19 801	19.817	(1 000)	2485012	20 0000	
	70 3,3'-Dichlorobenzidine	252	19.780	19 790	(0 999)	49764	1.00000	1.078
	71 Chrysene	228	19.839	19.860	(1 002)	176465	1 00000	1 098
	72 bis(2-Ethylhexyl)phthalate	149	19.999	20 004	(0 955)	102761	1.00000	1.050
*	134 Di-n-octylphthalate-d4	153	20.934	20 939	(1.000)	2978913	20 0000	
	73 Di-n-octylphthalate	149	20 939	20 950	(1.000)	185524	1 00000	1 087

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	21.431	21 457	(0 976)	161172	1.00000	1 022
75	Benzo(k)fluoranthene	252	21.463	21.457	(0 977)	196729	1.00000	1.077
187	Total Benzofluoranthenes	252	21.463	21 495	(0 977)	365266	2.00000	2.174
76	Benzo(a)pyrene	252	21.879	21.906	(0 996)	164004	1.00000	1.053
* 77	Perylene-d12	264	21.965	21 975	(1 000)	2615158	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	23.525	23.567	(1.071)	223397	1.00000	1.056
79	Dibenzo(a,h)anthracene	278	23.546	23.599	(1.072)	185846	1 00000	1.067
80	Benzo(g,h,i)perylene	276	23.957	24 021	(1 091)	197169	1.00000	1 063
90	N-Nitrosodimethylamine	74	3.486	3.545	(0.428)	40928	1.00000	1.044
103	Pyridine	79	3.486	3.502	(0 428)	66524	1.00000	1.013
91	Aniline	93	7.696	7.707	(0.945)	122667	1.00000	1.072
105	1-methylnaphthalene	141	11.537	11.547	(1.131)	86655	1.00000	1 057
93	Benzidine	184	17.696	17 707	(0 894)	79073	1.00000	1.689
111	Azobenzene (1,2-DP-Hydrazine)	77	14.229	14.251	(1 087)	128066	1.00000	1.080
143	1,4-Dioxane	88	2.776	2.792	(0 341)	29326	1.00000	1.016
$ 137	d8-1,4-Dioxane	96	2 722	2.738	(0.334)	28183	1.00000	1.022
144	alpha-Terpineol	59	10.260	10.276	(1.006)	42439	1.00000	1.022
177	p-Benzoquinone	82	6 820	6.825	(0 668)	8282	1.00000	0.7952
98	Retene	219	18.369	18.380	(0.928)	71166	1.00000	1.059
99	Perylene	252	21 997	21.906	(1 001)	134802	1.00000	1.066
133	Butylatedhydroxytoluene	205	13 257	13 268	(1 013)	95315	1.00000	1 092
115	Tributyl Phosphate	99	14.272	14 309	(0 923)	124613	1 00000	1.095
116	Dibutyl Phenyl Phosphate	175	16.019	16.046	(1 036)	79591	1.00000	1.054
117	Butyl Diphenyl Phosphate	94	17.712	17 718	(0 894)	25483	1.00000	1.073
118	Triphenyl Phosphate	326	19 320	19.331	(0 976)	21777	1 00000	1.006
123	Acetophenone	105	8.839	8 860	(1.085)	86664	1.00000	1.061
168	Pentachlorobenzene	250	13.433	13.455	(1 027)	48396	1.00000	1 079
113	Diphenyl Oxide	170	12 338	12 349	(0.943)	80567	1.00000	1.079
112	Biphenyl	154	12.146	12.156	(0.928)	135487	1.00000	1.099
120	2,3,4,6-Tetrachlorophenol	232	13.679	13.695	(1 045)	24814	1.00000	0.9154
151	1,2,4,5-Tetrachlorobenzene	216	11.702	11.713	(0.894)	53636	1.00000	1.062
110	Tetrachloroguaiacol	247	15.410	15.437	(0 996)	31513	2.00000	2.021
109	3,4,5-Trichloroguaiacol	213	13.775	13.791	(0.891)	17332	1.00000	1.042
181	3,4,6-Trichloroguaiacol	211	13.898	13.914	(1.706)	19873	1.00000	0.9659
108	4,5,6-Trichloroguaiacol	213	14.817	14.828	(1 132)	16134	1.00000	0.9773
184	3,4-Dichloroguaiacol	192	12.231	12.237	(1.502)	18816	1.00000	0.9914
107	4,5-Dichloroguaiacol	192	13.017	13.033	(0.995)	45456	2.00000	2 010
182	4,6-Dichloroguaiacol	192	13.017	13.033	(1 598)	45456	2.00000	1.963
185	4-Chloroguaiacol	115	11.136	11.147	(1 367)	13051	0.50000	0.5185
186	Carbaryl	144	16.270	16.297	(1 052)	47974	1.00000	0.8777
178	2-Benzyl-4-Chlorophenol	218	16 227	16.254	(1.049)	22095	1.00000	0.9737
106	Guaiacol	124	9.106	9 128	(1 118)	55810	1.00000	1.075
189	N-Nitrosomethylethylamine	88	5.319	5.329	(0 653)	29029	2 00000	1.992
188	2,6-Dichlorophenol	162	10 388	10 404	(1.275)	87710	2.00000	2 092

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 10191203.D
Lab Smp Id: IC11019
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Misc Info: 12-

Calibration Date: 19-OCT-2012
Calibration Time: 16:20
Client Smp ID: IC11019
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	873553	18.70
27 Naphthalene-d8	2597762	1298881	5195524	3061780	17.86
42 Acenaphthene-d10	1503943	751972	3007886	1702189	13.18
59 Phenanthrene-d10	2402003	1201002	4804006	2587630	7.73
69 Chrysene-d12	2331938	1165969	4663876	2485012	6.56
134 Di-n-octylphthala	2790605	1395302	5581210	2978913	6.75
77 Perylene-d12	2485610	1242805	4971220	2615158	5.21

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.15	7.65	8.65	8.14	-0.02
27 Naphthalene-d8	10.21	9.71	10.71	10.20	-0.07
42 Acenaphthene-d10	13.09	12.59	13.59	13.09	-0.01
59 Phenanthrene-d10	15.48	14.98	15.98	15.47	-0.05
69 Chrysene-d12	19.80	19.30	20.30	19.80	-0.01
134 Di-n-octylphthala	20.94	20.44	21.44	20.93	-0.01
77 Perylene-d12	21.97	21.47	22.47	21.96	-0.03

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

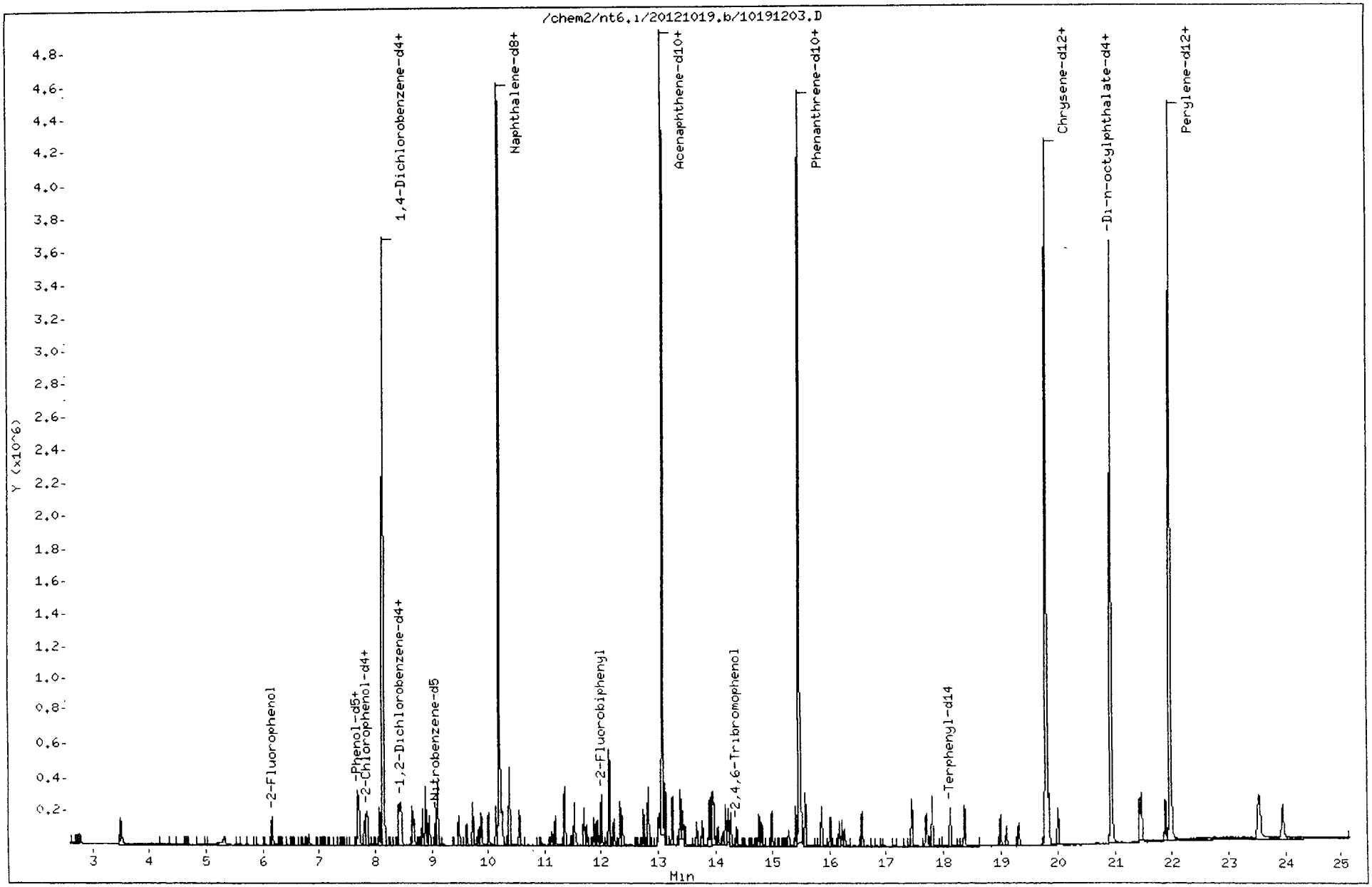
Data File: /chem2/nt6.1/20121019.b/10191203.D
Date : 19-OCT-2012 17:28
Client ID: IC11019
Sample Info: IC11019,

Instrument: nt6.1

Operator: JZ

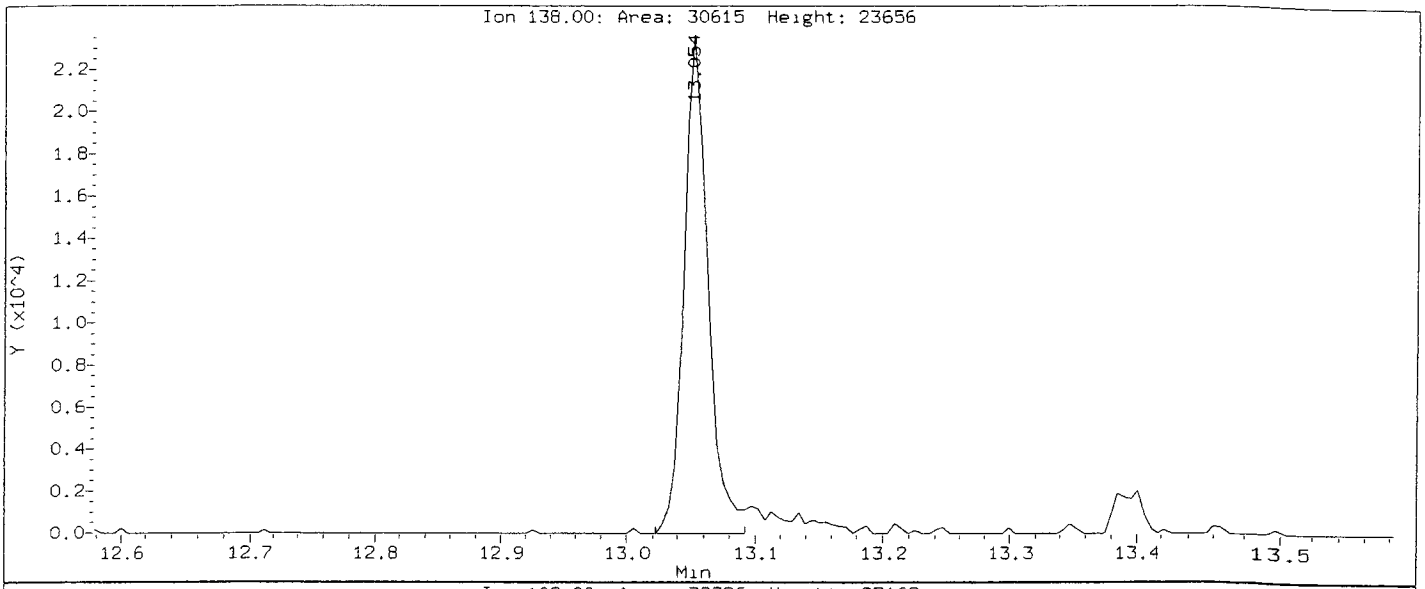
Column phase: ZB-5ms1

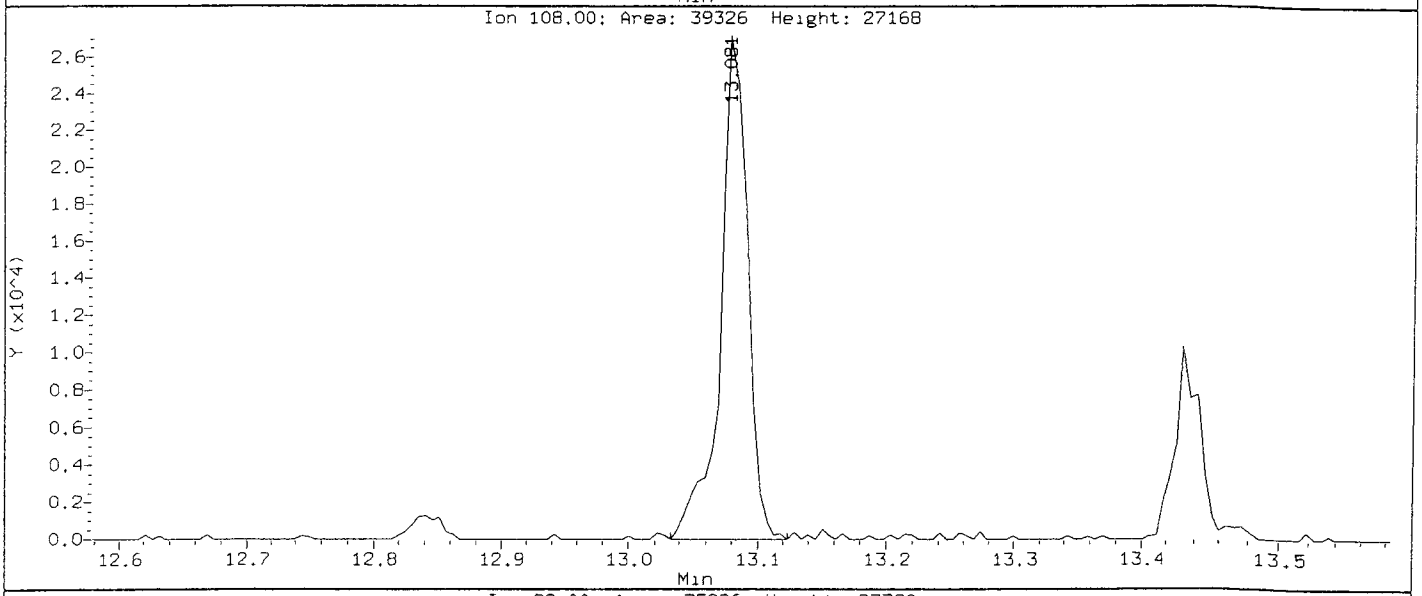
Column diameter: 0.32

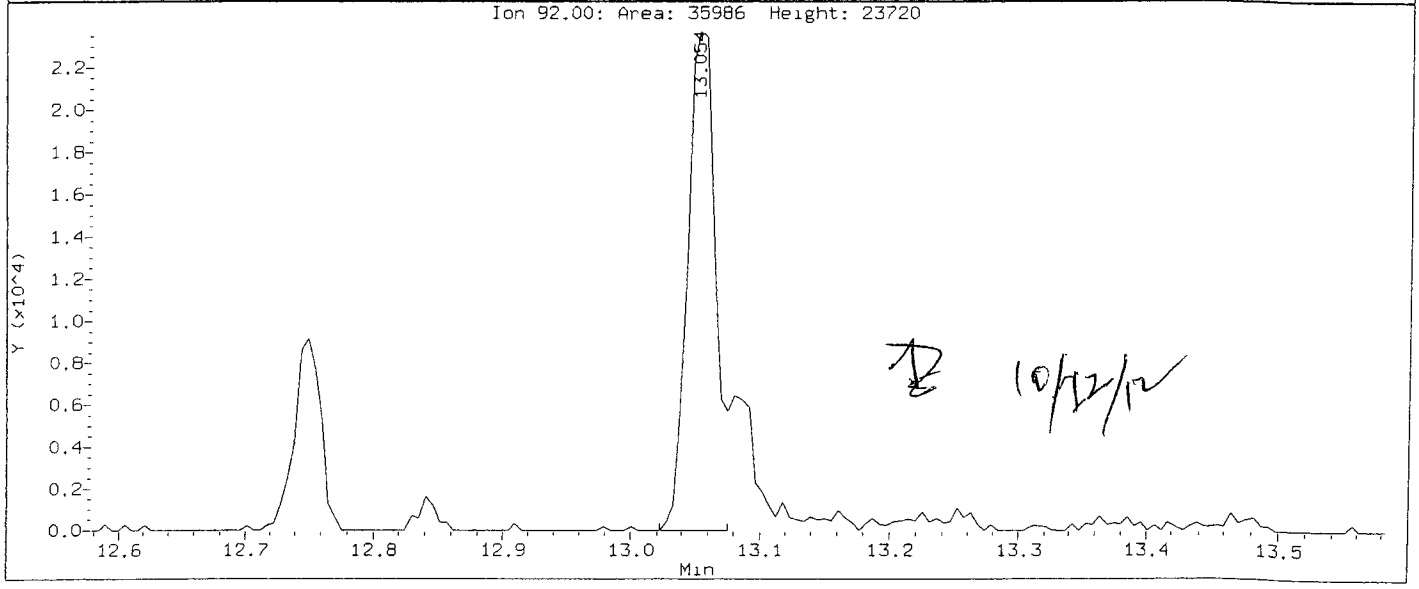


Data File: /chem2/nt6.i/20121019.b/10191203.D
Injection Date: 19-OCT-2012 17:28
Instrument: nt6.i
Client Sample ID:

Compound: 3-Nitroaniline
CAS Number: 99-09-2



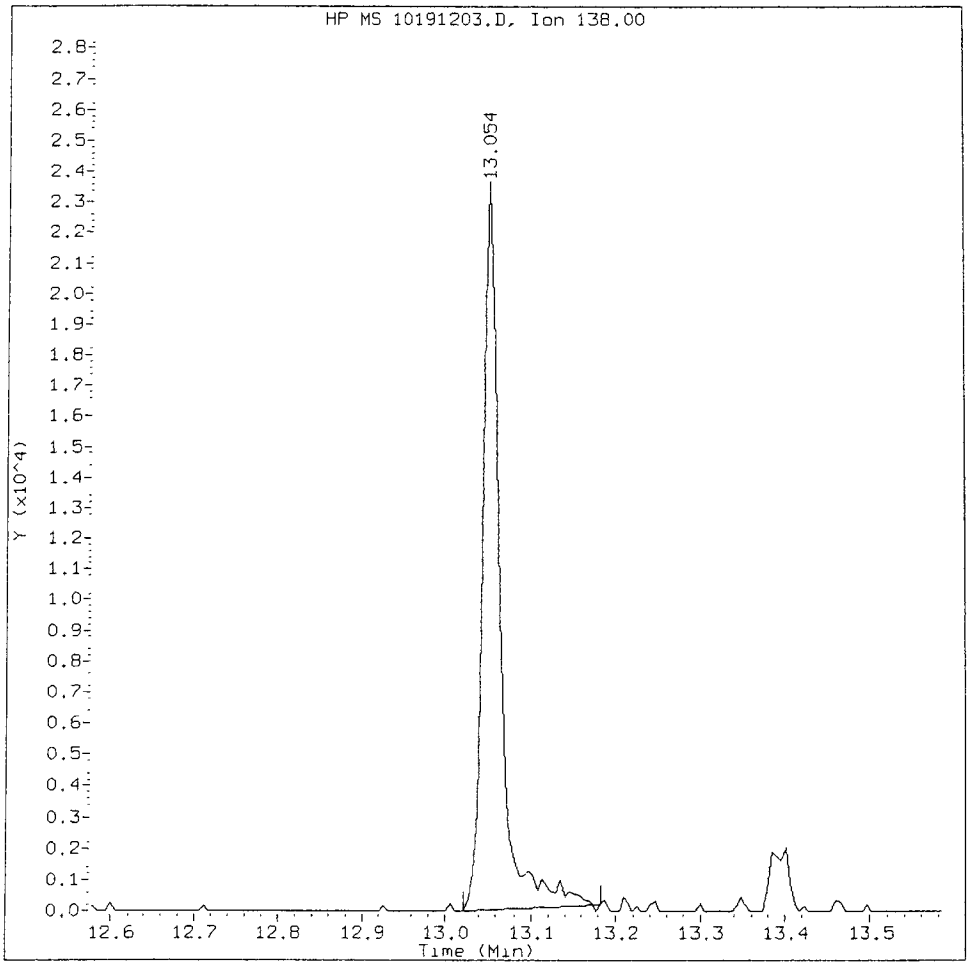




10/12/12

IC11019, /chem2/nt6.i/20121019.b/10191203.D

3-Nitroaniline Amount: 1.03 Area: 32964



MANUAL INTEGRATION for 3-Nitroaniline

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 10/21/12

CO-ELUTION SUMMARY FOR FILE - 10191203.D

Lab ID: IC11019, Method: SW846101912.m, Instrument: nt6.i, Date: 19-OCT-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121019.b/10191204.D
Lab Smp Id: IC51019 Client Smp ID: IC51019
Inj Date : 19-OCT-2012 18:03
Operator : JZ Inst ID: nt6.i
Smp Info : IC51019,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem2/nt6.i/20121019.b/SW846101912.m
Meth Date : 22-Oct-2012 10:34 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 18:03 Cal File: 10191204.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

10/27/12

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.170	6 179	(0.757)	317605	5.00000	4 974
$	2 Phenol-d5	99	7.709	7.877	(0.946)	412942	5.00000	5 221
	3 Phenol	94	7 725	7 744	(0 948)	439991	5 00000	5.227
$	5 2-Chlorophenol-d4	132	7.842	7.861	(0.963)	336095	5.00000	5.150
	4 Bis(2-Chloroethyl)ether	93	7.810	7.824	(0.959)	360686	5 00000	5.351
	6 2-Chlorophenol	128	7 864	7.877	(0.965)	367184	5.00000	5.243
	7 1,3-Dichlorobenzene	146	8.083	8.091	(0.992)	422924	5 00000	5.350
*	8 1,4-Dichlorobenzene-d4	152	8 147	8.150	(1.000)	902591	20.0000	
	9 1,4-Dichlorobenzene	146	8.173	8.177	(1.003)	418207	5.00000	5.369
$	10 1,2-Dichlorobenzene-d4	152	8 446	8.150	(1.037)	244139	5.00000	5 036
	12 1,2-Dichlorobenzene	146	8.467	8 476	(1 039)	399830	5 00000	5.309
	11 Benzyl alcohol	108	8 424	8.449	(1.034)	294445	5 00000	5.282
	14 2,2'-oxybis(1-Chloropropane)	45	8.692	8 700	(1.067)	513738	5.00000	5.360
	13 2-Methylphenol	108	8.665	8.684	(1.064)	345032	5.00000	5.404
	17 Hexachloroethane	117	8.964	8.967	(1.100)	161406	5.00000	5.276
	16 N-Nitroso-di-n-propylamine	70	8 900	8 930	(1.092)	258027	5.00000	5.504
	15 4-Methylphenol	108	8.895	8.919	(1 092)	356455	5 00000	5.442
$	18 Nitrobenzene-d5	82	9.082	9.517	(0 890)	362002	5.00000	5.045
	19 Nitrobenzene	77	9 108	9.122	(0 893)	392434	5.00000	5.289
	20 Isophorone	82	9.493	9.517	(0.930)	603713	5.00000	5.373
	21 2-Nitrophenol	139	9 632	9.640	(0.944)	178943	5.00000	5.305
	22 2,4-Dimethylphenol	107	9.739	9.758	(0.954)	341598	5 00000	5 205
	23 Bis(2-Chloroethoxy)methane	93	9 888	9 902	(0 969)	434226	5.00000	5 363
	24 Benzoic acid	105	9.899	10.100	(0.970)	389433	10.0000	10.72
	25 2,4-Dichlorophenol	162	10 016	10.030	(0.982)	283045	5.00000	5 312
	26 1,2,4-Trichlorobenzene	180	10 145	10.159	(0.994)	328568	5.00000	5 261
*	27 Naphthalene-d8	136	10 203	10 212	(1.000)	3248649	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10 235	10 249	(1.003)	1147157	5 00000	5.346
	29 4-Chloroaniline	127	10.380	10.394	(1 017)	512508	5 00000	5 221
	30 Hexachlorobutadiene	225	10.561	10.565	(1 035)	195901	5 00000	5.247
	31 4-Chloro-3-methylphenol	107	11.192	11.206	(1 097)	272907	5 00000	5.377
	32 2-Methylnaphthalene	141	11.363	11.377	(1 114)	644318	5.00000	5.103
	33 Hexachlorocyclopentadiene	237	11.747	11.756	(0.898)	187887	5 00000	5.569
	34 2,4,6-Trichlorophenol	196	11 881	11.889	(0 908)	187161	5 00000	5.136
	35 2,4,5-Trichlorophenol	196	11 940	11.948	(0 912)	194854	5.00000	5 221
$	36 2-Fluorobiphenyl	172	12 009	11 954	(0.918)	664998	5 00000	4.967
	37 2-Chloronaphthalene	162	12 148	12 162	(0.928)	625545	5.00000	5.267
	38 2-Nitroaniline	65	12.378	12 397	(0.946)	210509	5 00000	5.192
	39 Dimethylphthalate	163	12 752	12.776	(0 974)	657132	5 00000	5.363
	40 Acenaphthylene	152	12.832	12.840	(0.980)	1133873	5.00000	5.401
	41 2,6-Dinitrotoluene	165	12.848	12.867	(0 982)	142553	5.00000	5.342
*	42 Acenaphthene-d10	164	13.088	13.091	(1.000)	1861891	20.0000	
	43 3-Nitroaniline	138	13.056	13.081	(0.998)	196437	5.00000	5.397
	44 Acenaphthene	153	13.136	13.150	(1 004)	702917	5 00000	5.280
	45 2,4-Dinitrophenol	184	13.222	13.252	(1.010)	64095	10.0000	6.570
	46 Dibenzofuran	168	13 393	13.417	(1 023)	1024876	5.00000	5.050
	47 4-Nitrophenol	109	13 361	13.391	(1 021)	66155	5 00000	4.793
	48 2,4-Dinitrotoluene	165	13 473	13.503	(1.029)	183237	5 00000	5 467
	50 Diethylphthalate	149	13.911	13.930	(1.063)	676470	5.00000	5.196
	49 Fluorene	166	13.954	13.973	(1.066)	751312	5.00000	5.224
	51 4-Chlorophenyl-phenylether	204	13.980	13.989	(1 068)	342409	5 00000	5.190
	52 4-Nitroaniline	138	14.050	14.096	(1.073)	172547	5.00000	5.280
	53 4,6-Dinitro-2-methylphenol	198	14 130	14.165	(0 913)	149332	10.0000	8.920
	54 N-Nitrosodiphenylamine	169	14.183	14.203	(0 917)	501148	5.00000	5.349
$	55 2,4,6-Tribromophenol	330	14.381	14 395	(1 099)	79671	5.00000	5.063
	56 4-Bromophenyl-phenylether	248	14.766	14.774	(0.954)	189839	5 00000	5.239
	57 Hexachlorobenzene	284	14 990	14 999	(0.969)	198902	5 00000	5.207
	58 Pentachlorophenol	266	15.289	15.298	(0.988)	94979	5 00000	5.199
*	59 Phenanthrene-d10	188	15.471	15.479	(1.000)	2797380	20.0000	
	60 Phenanthrene	178	15.508	15.522	(1.002)	1011645	5 00000	5.336
	61 Anthracene	178	15 578	15.597	(1.007)	1034312	5.00000	5.306
	62 Carbazole	167	15 861	15.875	(1.025)	823139	5.00000	5.343
	63 Di-n-butylphthalate	149	16.577	16.585	(1.071)	1032597	5.00000	5.379
	64 Fluoranthene	202	17 453	17.467	(1 128)	1017635	5.00000	5.192
	65 Pyrene	202	17.811	17.825	(0.899)	1055683	5 00000	5.418
$	66 Terphenyl-d14	244	18 120	18.124	(0.915)	505444	5 00000	5 077
	67 Butylbenzylphthalate	149	19 002	19.016	(0.960)	400130	5 00000	5 379
	68 Benzo(a)anthracene	228	19.777	19.796	(0.999)	881430	5.00000	5.291
*	69 Chrysene-d12	240	19.803	19.817	(1.000)	2500663	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.777	19.790	(0 999)	243352	5.00000	5.155
	71 Chrysene	228	19 841	19.860	(1.002)	867945	5 00000	5 240
	72 bis(2-Ethylhexyl)phthalate	149	19.996	20 004	(0.955)	533467	5 00000	5.336
*	134 Di-n-octylphthalate-d4	153	20 930	20.939	(1.000)	2940989	20.0000	
	73 Di-n-octylphthalate	149	20 941	20 950	(1.000)	896904	5.00000	5.211

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	21 433	21 457	(0 976)	941660	5.00000	5.625
75	Benzo(k)fluoranthene	252	21.465	21.457	(0.977)	932704	5 00000	5.087
187	Total Benzofluoranthenes	252	21 465	21.495	(0 977)	1790162	10 0000	10 46 (M)
76	Benzo(a)pyrene	252	21 881	21.906	(0 996)	849164	5.00000	5.309
* 77	Perylene-d12	264	21 967	21.975	(1 000)	2601675	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	23.527	23.567	(1.071)	1153190	5.00000	5.308
79	Dibenzo(a,h)anthracene	278	23.548	23 599	(1.072)	957568	5.00000	5.339
80	Benzo(g,h,i)perylene	276	23.959	24 021	(1 091)	1000571	5 00000	5.274
90	N-Nitrosodimethylamine	74	3 494	3.545	(0.429)	228554	5.00000	5 412
103	Pyridine	79	3.472	3 502	(0.426)	398810	5.00000	5.554
91	Aniline	93	7.698	7.707	(0 945)	630639	5.00000	5.219
105	1-methylnaphthalene	141	11 534	11 547	(1 130)	443990	5.00000	5.070
93	Benzidine	184	17 698	17.707	(0 894)	318554	5.00000	5 749
111	Azobenzene (1,2-DP-Hydrazine)	77	14 231	14.251	(1 087)	708868	5.00000	5 300
143	1,4-Dioxane	88	2 773	2.792	(0 340)	154646	5 00000	5.138
$ 137	d8-1,4-Dioxane	96	2.724	2 738	(0 334)	159869	5 00000	5.392
144	alpha-Terpineol	59	10 262	10 276	(1 006)	226395	5.00000	5.090
177	p-Benzoquinone	82	6 817	6.825	(0 668)	58326	5 00000	5.182
98	Retene	219	18 372	18 380	(0 928)	356942	5.00000	5.183
99	Perylene	252	21.994	21.906	(1 001)	610491	5.00000	4 901
133	Butylatedhydroxytoluene	205	13 259	13 268	(1.013)	493575	5 00000	5.111
115	Tributyl Phosphate	99	14 274	14 309	(0 923)	648353	5 00000	5.177
116	Dibutyl Phenyl Phosphate	175	16 016	16 046	(1.035)	406954	5.00000	4 991
117	Butyl Diphenyl Phosphate	94	17 709	17.718	(0.894)	130288	5.00000	5.292
118	Triphenyl Phosphate	326	19 317	19.331	(0.975)	112884	5 00000	5 121
123	Acetophenone	105	8 841	8.860	(1.085)	465428	5.00000	5 331
168	Pentachlorobenzene	250	13 441	13.455	(1.027)	250654	5.00000	5.072
113	Diphenyl Oxide	170	12.335	12.349	(0 942)	415328	5.00000	5.056
112	Biphenyl	154	12 143	12.156	(0 928)	682241	5.00000	5.038
120	2,3,4,6-Tetrachlorophenol	232	13 681	13 695	(1 045)	156178	5.00000	5.175
151	1,2,4,5-Tetrachlorobenzene	216	11 705	11.713	(0 894)	295788	5.00000	5.229
110	Tetrachloroguaiacol	247	15.412	15.437	(0.996)	184037	10 0000	10.59
109	3,4,5-Trichloroguaiacol	213	13.777	13.791	(0 891)	98604	5.00000	5.313
181	3,4,6-Trichloroguaiacol	211	13.895	13 914	(1.706)	123781	5.00000	5.520
108	4,5,6-Trichloroguaiacol	213	14.814	14 828	(1.132)	95035	5.00000	5.172
184	3,4-Dichloroguaiacol	192	12.228	12.237	(1 501)	111058	5.00000	5.423
107	4,5-Dichloroguaiacol	192	13.013	13.033	(0.994)	268267	10 0000	10.55
182	4,6-Dichloroguaiacol	192	13.013	13 033	(1.597)	268267	10 0000	10.78
185	4-Chloroguaiacol	115	11.133	11.147	(1.367)	68134	2.50000	2.579
186	Carbaryl	144	16.272	16.297	(1 052)	350097	5.00000	5.581
178	2-Benzyl-4-Chlorophenol	218	16 229	16 254	(1 049)	123285	5.00000	5 017
106	Guaiacol	124	9 108	9 128	(1 118)	282826	5 00000	5 178
189	N-Nitrosomethylethylamine	88	5.321	5.329	(0 653)	76603	5 00000	5 058
188	2,6-Dichlorophenol	162	10 390	10 404	(1 275)	240088	5.00000	5 349

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 10191204.D
Lab Smp Id: IC51019
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Misc Info: 12-

Calibration Date: 19-OCT-2012
Calibration Time: 16:20
Client Smp ID: IC51019
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	902591	22.65
27 Naphthalene-d8	2597762	1298881	5195524	3248649	25.06
42 Acenaphthene-d10	1503943	751972	3007886	1861891	23.80
59 Phenanthrene-d10	2402003	1201002	4804006	2797380	16.46
69 Chrysene-d12	2331938	1165969	4663876	2500663	7.24
134 Di-n-octylphthala	2790605	1395302	5581210	2940989	5.39
77 Perylene-d12	2485610	1242805	4971220	2601675	4.67

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.15	7.65	8.65	8.15	0.00
27 Naphthalene-d8	10.21	9.71	10.71	10.20	-0.05
42 Acenaphthene-d10	13.09	12.59	13.59	13.09	0.00
59 Phenanthrene-d10	15.48	14.98	15.98	15.47	-0.03
69 Chrysene-d12	19.80	19.30	20.30	19.80	0.00
134 Di-n-octylphthala	20.94	20.44	21.44	20.93	-0.02
77 Perylene-d12	21.97	21.47	22.47	21.97	-0.02

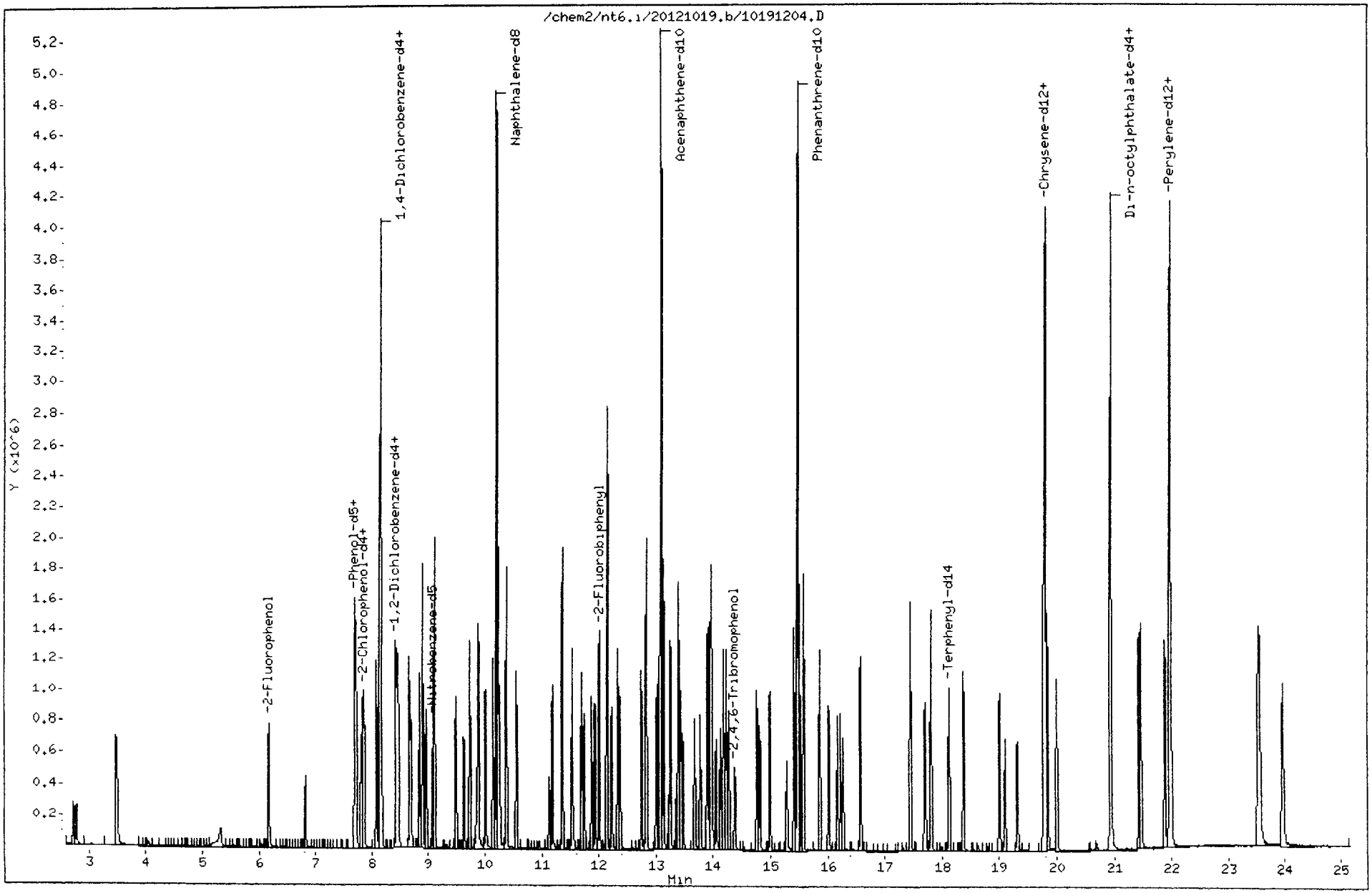
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.1/20121019.b/10191204.D
Date : 19-OCT-2012 18:03
Client ID: IC51019
Sample Info: IC51019,

Instrument: nt6.1

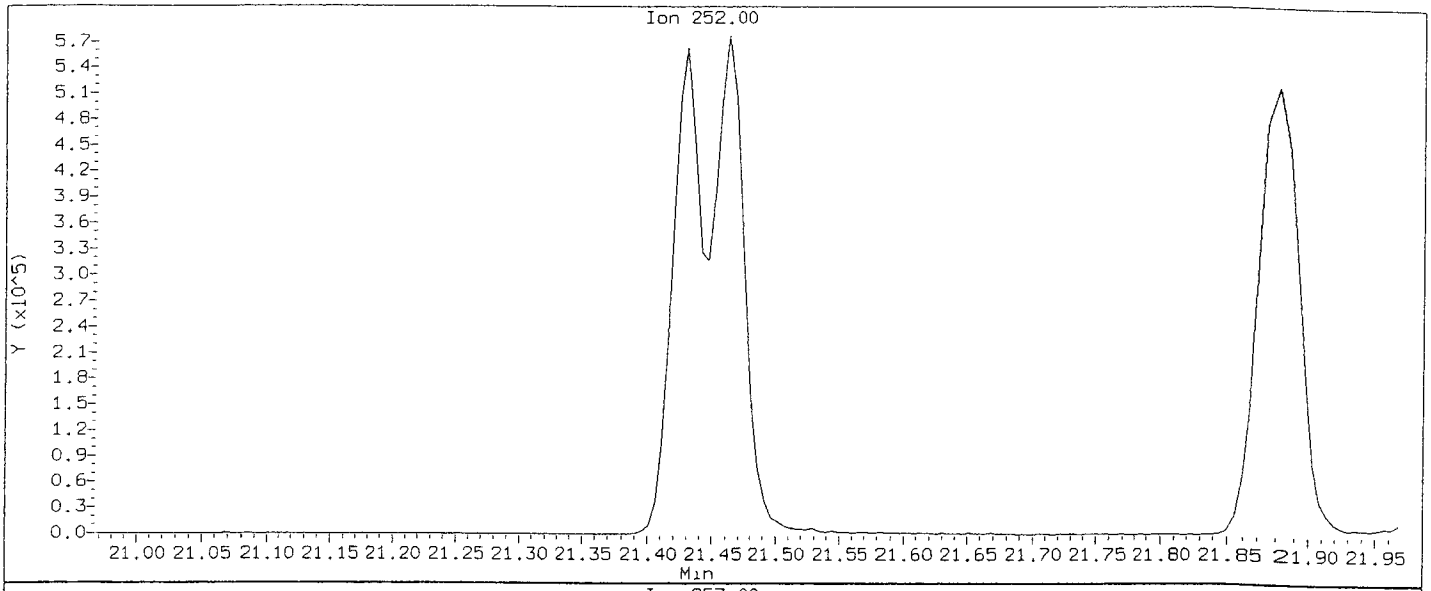
Operator: JZ
Column diameter: 0.32

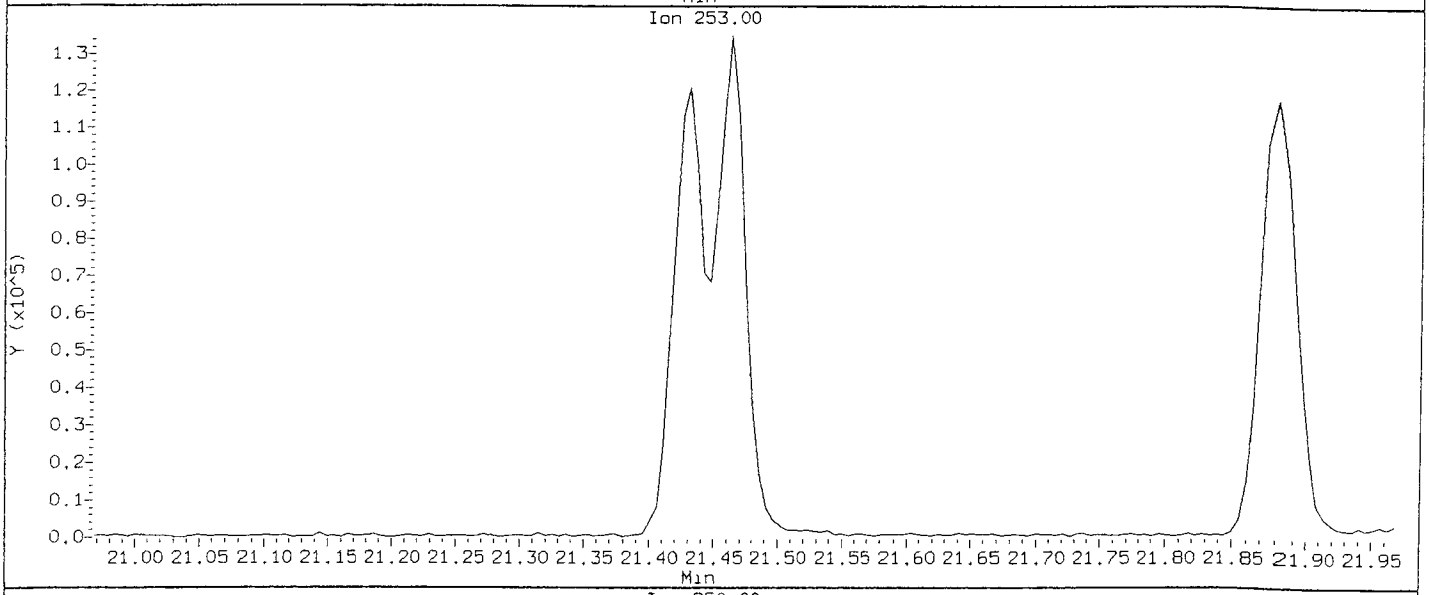
Column phase: ZB-5msi

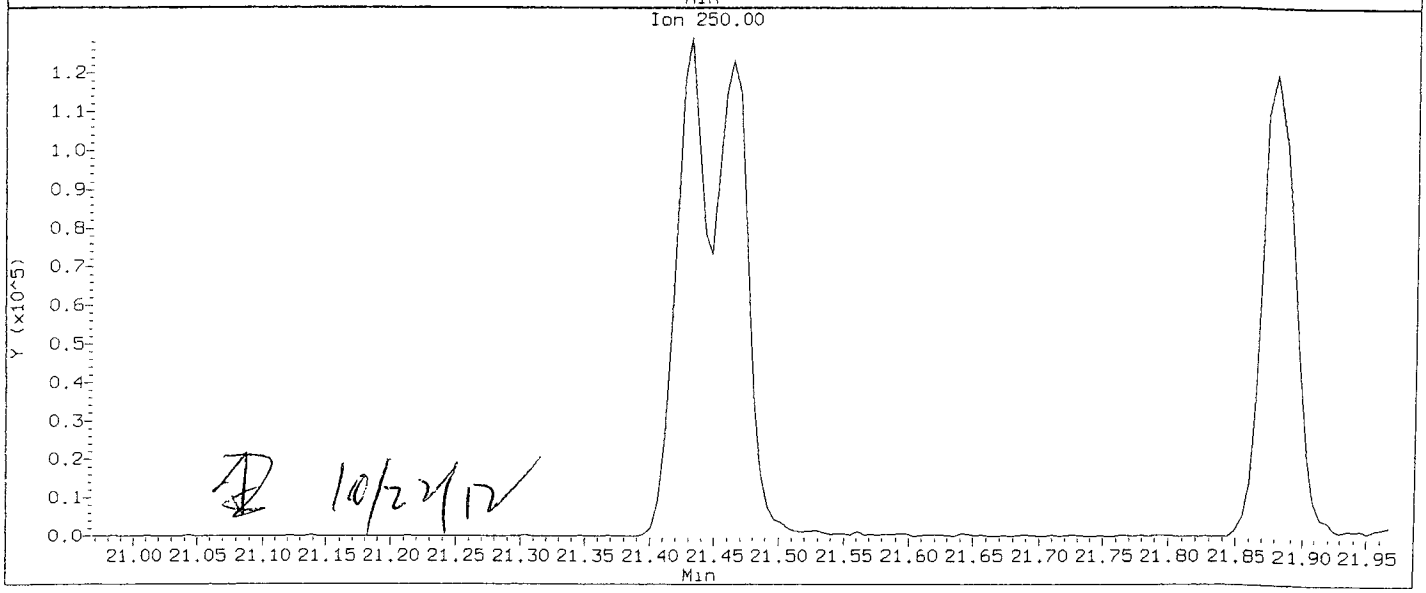


Data File: /chem2/nt6.i/20121019.b/10191204.D
Injection Date: 19-OCT-2012 18:03
Instrument: nt6.i
Client Sample ID:

Compound: Total Benzofluoranthenes
CAS Number:



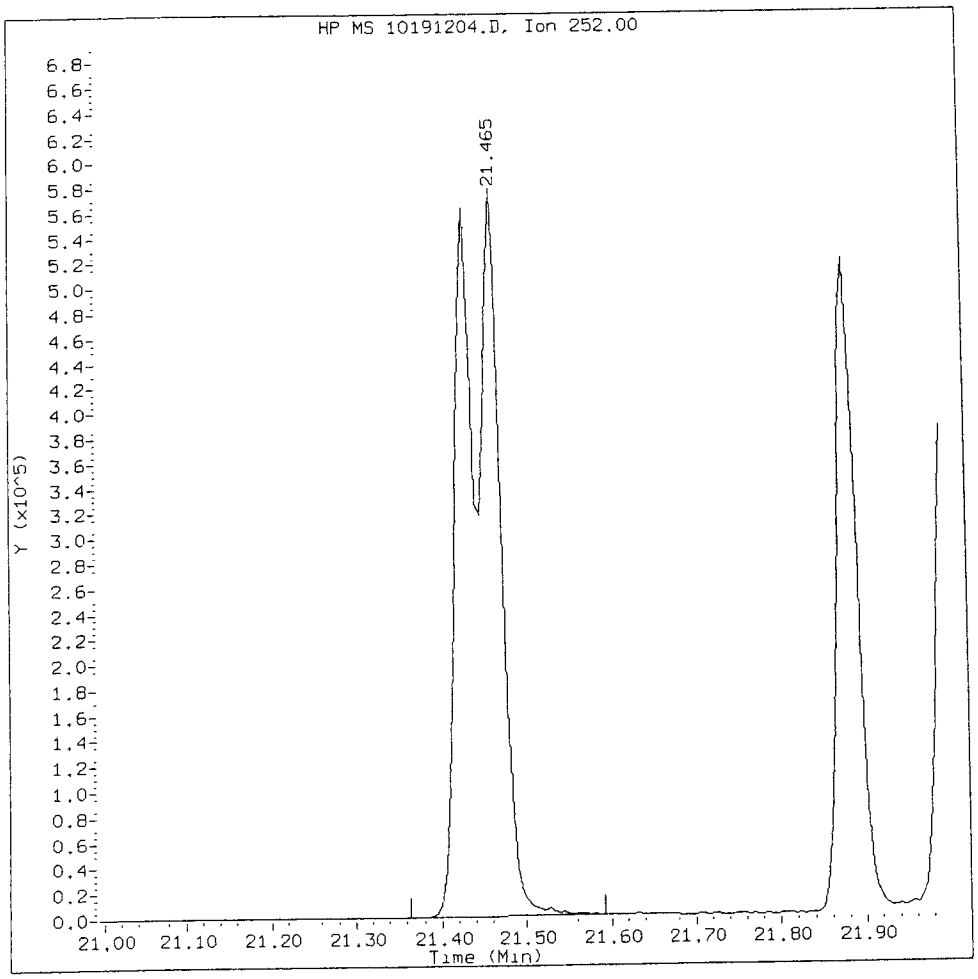




10/24/12

IC51019, /chem2/nt6.i/20121019.b/10191204.D

Total Benzofluoranthenes Amount: 10.46 Area: 1790162



MANUAL INTEGRATION for Total Benzofluoranthenes

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 10/22/12

CO-ELUTION SUMMARY FOR FILE - 10191204.D

Lab ID: IC51019, Method: SW846101912.m, Instrument: nt6.i, Date: 19-OCT-2012

RT	CO-ELUTION COMPOUNDS
19.777	3,3'-Dichlorobenzidine and Benzo(a)anthracene

checked OK

10/22/12

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121019.b/10191205.D
Lab Smp Id: IC101019 Client Smp ID: IC101019
Inj Date : 19-OCT-2012 18:37
Operator : JZ Inst ID: nt6.i
Smp Info : IC101019,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem2/nt6.i/20121019.b/SW846101912.m
Meth Date : 22-Oct-2012 10:34 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 18:37 Cal File: 10191205.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

10/22/12

AMOUNTS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$ 1 2-Fluorophenol	112	6 167	6.179	(0.757)	478616	10 0000	9.113
$ 2 Phenol-d5	99	7 705	7.877	(0 946)	614360	10.0000	9.366
3 Phenol	94	7.727	7 744	(0 948)	682449	10.0000	9.677
$ 5 2-Chlorophenol-d4	132	7.839	7 861	(0.962)	508034	10 0000	9.382
4 Bis(2-Chloroethyl)ether	93	7 812	7.824	(0.959)	529794	10.0000	9.451
6 2-Chlorophenol	128	7.865	7.877	(0 965)	568240	10.0000	9.683
7 1,3-Dichlorobenzene	146	8 084	8.091	(0 992)	638587	10 0000	9.651
* 8 1,4-Dichlorobenzene-d4	152	8 149	8.150	(1 000)	764299	20 0000	
9 1,4-Dichlorobenzene	146	8 170	8 177	(1 003)	629934	10 0000	9.659
$ 10 1,2-Dichlorobenzene-d4	152	8 448	8.150	(1.037)	360802	10.0000	9.064
12 1,2-Dichlorobenzene	146	8.469	8 476	(1 039)	598600	10 0000	9.532
11 Benzyl alcohol	108	8 426	8 449	(1 034)	413618	10 0000	9.042
14 2,2'-oxybis(1-Chloropropane)	45	8 688	8.700	(1.066)	761210	10.0000	9 527
13 2-Methylphenol	108	8 661	8.684	(1.063)	521417	10.0000	9.731
17 Hexachloroethane	117	8.961	8.967	(1.100)	243926	10.0000	9.556
16 N-Nitroso-di-n-propylamine	70	8 902	8.930	(1.092)	377351	10.0000	9.624
15 4-Methylphenol	108	8.896	8.919	(1.092)	541985	10.0000	9.828
$ 18 Nitrobenzene-d5	82	9.078	9.517	(0 890)	546100	10.0000	9.338
19 Nitrobenzene	77	9.110	9.122	(0.893)	582296	10.0000	9.560
20 Isophorone	82	9 489	9.517	(0.930)	880753	10.0000	9.550
21 2-Nitrophenol	139	9 628	9 640	(0 943)	281469	10.0000	10 01
22 2,4-Dimethylphenol	107	9 741	9.758	(0.954)	514884	10.0000	9.557
23 Bis(2-Chloroethoxy)methane	93	9 885	9.902	(0.969)	633191	10 0000	9 534
24 Benzoic acid	105	9.922	10.100	(0 972)	672624	20.0000	21.62
25 2,4-Dichlorophenol	162	10 013	10.030	(0 981)	432295	10.0000	9 803
26 1,2,4-Trichlorobenzene	180	10.147	10 159	(0 994)	480835	10.0000	9 421
* 27 Naphthalene-d8	136	10 205	10 212	(1 000)	2706123	20 0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10 237	10 249	(1.003)	1707982	10 0000	9.663
	29 4-Chloroanıline	127	10.376	10.394	(1.017)	726453	10.0000	9.140
	30 Hexachlorobutadiene	225	10 558	10 565	(1 035)	289890	10.0000	9.482
	31 4-Chloro-3-methylphenol	107	11 194	11 206	(1 097)	416494	10 0000	9.888
	32 2-Methylnaphthalene	141	11 365	11.377	(1.114)	912903	10 0000	8 976
	33 Hexachlorocyclopentadıene	237	11.749	11.756	(0.898)	272612	10 0000	9.860
	34 2,4,6-Trıchlorophenol	196	11.883	11 889	(0 908)	298560	10.0000	9.963
	35 2,4,5-Trıchlorophenol	196	11 936	11 948	(0 912)	312597	10.0000	10.13
$	36 2-Fluorobıphenyl	172	12 011	11 954	(0.918)	995656	10 0000	9.257
	37 2-Chloronaphthalene	162	12.145	12.162	(0.928)	904320	10.0000	9 426
	38 2-Nitroanılıne	65	12.380	12 397	(0 946)	310863	10.0000	9.476
	39 Dimethylphthalate	163	12.754	12.776	(0 975)	965497	10 0000	9 674
	40 Acenaphthylene	152	12.828	12.840	(0.980)	1653689	10 0000	9 672
	41 2,6-Dınıtrotoluene	165	12.844	12 867	(0.982)	220135	10.0000	10.02
*	42 Acenaphthene-d10	164	13.085	13.091	(1 000)	1532884	20.0000	
	43 3-Nıtroanılıne	138	13 058	13.081	(0 998)	284408	10 0000	9.613
	44 Acenaphthene	153	13 133	13.150	(1.004)	1027392	10 0000	9.522
	45 2,4-Dınıtrophenol	184	13.224	13.252	(1.011)	151572	20.0000	19 23
	46 Dıbenzofuran	168	13 400	13.417	(1 024)	1454158	10 0000	8.995
	47 4-Nitrophenol	109	13.363	13.391	(1.021)	109997	10 0000	9.757
	48 2,4-Dinitrotoluene	165	13.475	13.503	(1.030)	290861	10.0000	10 40
	50 Diethylphthalate	149	13.913	13.930	(1 063)	1011604	10.0000	9.573
	49 Fluorene	166	13 956	13 973	(1.067)	1137114	10 0000	9.699
	51 4-Chlorophenyl-phenylether	204	13 982	13 989	(1 069)	513237	10 0000	9.581
	52 4-Nitroanilıne	138	14 057	14 096	(1.074)	262427	10.0000	9.814
	53 4,6-Dınıtro-2-methylphenol	198	14.132	14 165	(0.913)	283503	20 0000	20.05
	54 N-Nıtrosodiphenylamıne	169	14.185	14 203	(0.917)	729085	10 0000	9.409
$	55 2,4,6-Trıbromophenol	330	14.383	14.395	(1 099)	126660	10 0000	9.832
	56 4-Bromophenyl-phenylether	248	14 768	14.774	(0.954)	293872	10 0000	9 710
	57 Hexachlorobenzene	284	14 992	14 999	(0.969)	299785	10.0000	9.471
	58 Pentachlorophenol	266	15 286	15 298	(0.988)	171004	10.0000	10.80
*	59 Phenanthrene-d10	188	15.473	15 479	(1 000)	2359211	20 0000	
	60 Phenanthrene	178	15 510	15.522	(1.002)	1501520	10 0000	9.536
	61 Anthracene	178	15 579	15 597	(1.007)	1576003	10 0000	9.686
	62 Carbazole	167	15.863	15.875	(1 025)	1241561	10.0000	9.663
	63 Di-n-butylphthalate	149	16 578	16.585	(1.071)	1593249	10 0000	9.880
	64 Fluoranthene	202	17 455	17.467	(1 128)	1587702	10 0000	9.701
	65 Pyrene	202	17.813	17.825	(0.899)	1666281	10.0000	9.521
$	66 Terphenyl-d14	244	18.122	18 124	(0.915)	802038	10.0000	9.095
	67 Butylbenzylphthalate	149	19.004	19.016	(0.960)	661356	10.0000	9 807
	68 Benzo(a)anthracene	228	19.778	19 796	(0.999)	1446928	10 0000	9.634
*	69 Chrysene-d12	240	19 805	19.817	(1.000)	2281812	20.0000	
	70 3,3'-Dichlorobenzidıne	252	19.778	19 790	(0.999)	395225	10 0000	9.369
	71 Chrysene	228	19 843	19.860	(1.002)	1386324	10.0000	9.366
	72 bis(2-Ethylhexyl)phthalate	149	19.997	20.004	(0 955)	886665	10 0000	9 615
*	134 Di-n-octylphthalate-d4	153	20.932	20.939	(1.000)	2747493	20 0000	
	73 Dı-n-octylphthalate	149	20 943	20 950	(1 000)	1517269	10.0000	9 571

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	21.434	21.457	(0 976)	1564972	10.0000	9.949
75	Benzo(k)fluoranthene	252	21.467	21.457	(0 977)	1600158	10.0000	9.445
187	Total Benzofluoranthenes	252	21 467	21.495	(0.977)	3006191	20 0000	18.98
76	Benzo(a)pyrene	252	21 883	21.906	(0 996)	1442593	10.0000	9.684
* 77	Perylene-d12	264	21.969	21.975	(1.000)	2448553	20 0000	
78	Indeno(1,2,3-cd)pyrene	276	23 534	23.567	(1.071)	1938470	10.0000	9 605
79	Dibenzo(a,h)anthracene	278	23.555	23.599	(1.072)	1608584	10 0000	9.643
80	Benzo(g,h,i)perylene	276	23 967	24.021	(1.091)	1686268	10.0000	9.577
90	N-Nitrosodimethylamine	74	3 469	3 545	(0 426)	338786	10 0000	9 600
103	Pyridine	79	3 448	3.502	(0.423)	586955	10 0000	9.737
91	Aniline	93	7.695	7 707	(0 944)	895191	10.0000	9 032
105	1-methylnaphthalene	141	11 536	11.547	(1.130)	637228	10.0000	9 021
93	Benzidine	184	17.700	17.707	(0.894)	481923	10.0000	9.682 (M)
111	Azobenzene (1,2-DP-Hydrazine)	77	14 233	14.251	(1.088)	1060444	10.0000	9.720
143	1,4-Dioxane	88	2.753	2.792	(0 338)	239813	10.0000	9.522
$ 137	d8-1,4-Dioxane	96	2.700	2.738	(0 331)	244331	10 0000	9.797
144	alpha-Terpineol	59	10.259	10.276	(1 005)	331602	10.0000	9.191
177	p-Benzoquinone	82	6 813	6.825	(0.668)	97223	10.0000	10.27
98	Retene	219	18.373	18.380	(0.928)	560458	10.0000	9.166
99	Perylene	252	21.995	21.906	(1.001)	1156823	10.0000	9.901
133	Butylatedhydroxytoluene	205	13.256	13.268	(1 013)	704854	10.0000	9.124
115	Tributyl Phosphate	99	14.276	14.309	(0.923)	970665	10.0000	9.380
116	Dibutyl Phenyl Phosphate	175	16 018	16.046	(1 035)	643247	10.0000	9 508
117	Butyl Diphenyl Phosphate	94	17 711	17.718	(0 894)	202384	10.0000	9.238
118	Triphenyl Phosphate	326	19 319	19.331	(0.975)	186372	10.0000	9.439
123	Acetophenone	105	8.843	8.860	(1.085)	695865	10.0000	9.553
168	Pentachlorobenzene	250	13.437	13.455	(1 027)	370200	10 0000	9 308
113	Diphenyl Oxide	170	12 342	12.349	(0.943)	606899	10.0000	9.210
112	Biphenyl	154	12 145	12.156	(0.928)	968473	10.0000	8.982
120	2,3,4,6-Tetrachlorophenol	232	13 683	13.695	(1.046)	255202	10.0000	10.20
151	1,2,4,5-Tetrachlorobenzene	216	11.706	11.713	(0.895)	434476	10.0000	9.489
110	Tetrachloroguaiacol	247	15.414	15.437	(0 996)	296829	20.0000	20.19
109	3,4,5-Trichloroguaiacol	213	13.779	13.791	(0.891)	153418	10.0000	9.851
181	3,4,6-Trichloroguaiacol	211	13.897	13.914	(1.705)	187787	10.0000	9.917
108	4,5,6-Trichloroguaiacol	213	14.810	14.828	(1.132)	155605	10.0000	10 21
184	3,4-Dichloroguaiacol	192	12 230	12.237	(1.501)	176061	10.0000	10.11
107	4,5-Dichloroguaiacol	192	13 015	13.033	(0.995)	413192	20.0000	19.80
182	4,6-Dichloroguaiacol	192	13.015	13.033	(1.597)	413649	20 0000	19 72
185	4-Chloroguaiacol	115	11.135	11.147	(1.366)	106946	5.00000	4.833
186	Carbaryl	144	16.274	16 297	(1.052)	568341	10.0000	10 55
178	2-Benzyl-4-Chlorophenol	218	16.226	16.254	(1.049)	203937	10.0000	9 880
106	Guaiacol	124	9.110	9.128	(1 118)	419473	10 0000	9.286
189	N-Nitrosomethylethylamine	88	5 317	5.329	(0 653)	120268	10.0000	9.525
188	2,6-Dichlorophenol	162	10 387	10 404	(1.275)	336364	10 0000	9.112

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 10191205.D
Lab Smp Id: IC101019
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Misc Info: 12-

Calibration Date: 19-OCT-2012
Calibration Time: 16:20
Client Smp ID: IC101019
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	764299	3.86
27 Naphthalene-d8	2597762	1298881	5195524	2706123	4.17
42 Acenaphthene-d10	1503943	751972	3007886	1532884	1.92
59 Phenanthrene-d10	2402003	1201002	4804006	2359211	-1.78
69 Chrysene-d12	2331938	1165969	4663876	2281812	-2.15
134 Di-n-octylphthala	2790605	1395302	5581210	2747493	-1.54
77 Perylene-d12	2485610	1242805	4971220	2448553	-1.49

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.15	7.65	8.65	8.15	0.03
27 Naphthalene-d8	10.21	9.71	10.71	10.21	-0.03
42 Acenaphthene-d10	13.09	12.59	13.59	13.08	-0.02
59 Phenanthrene-d10	15.48	14.98	15.98	15.47	-0.02
69 Chrysene-d12	19.80	19.30	20.30	19.81	0.01
134 Di-n-octylphthala	20.94	20.44	21.44	20.93	-0.02
77 Perylene-d12	21.97	21.47	22.47	21.97	-0.01

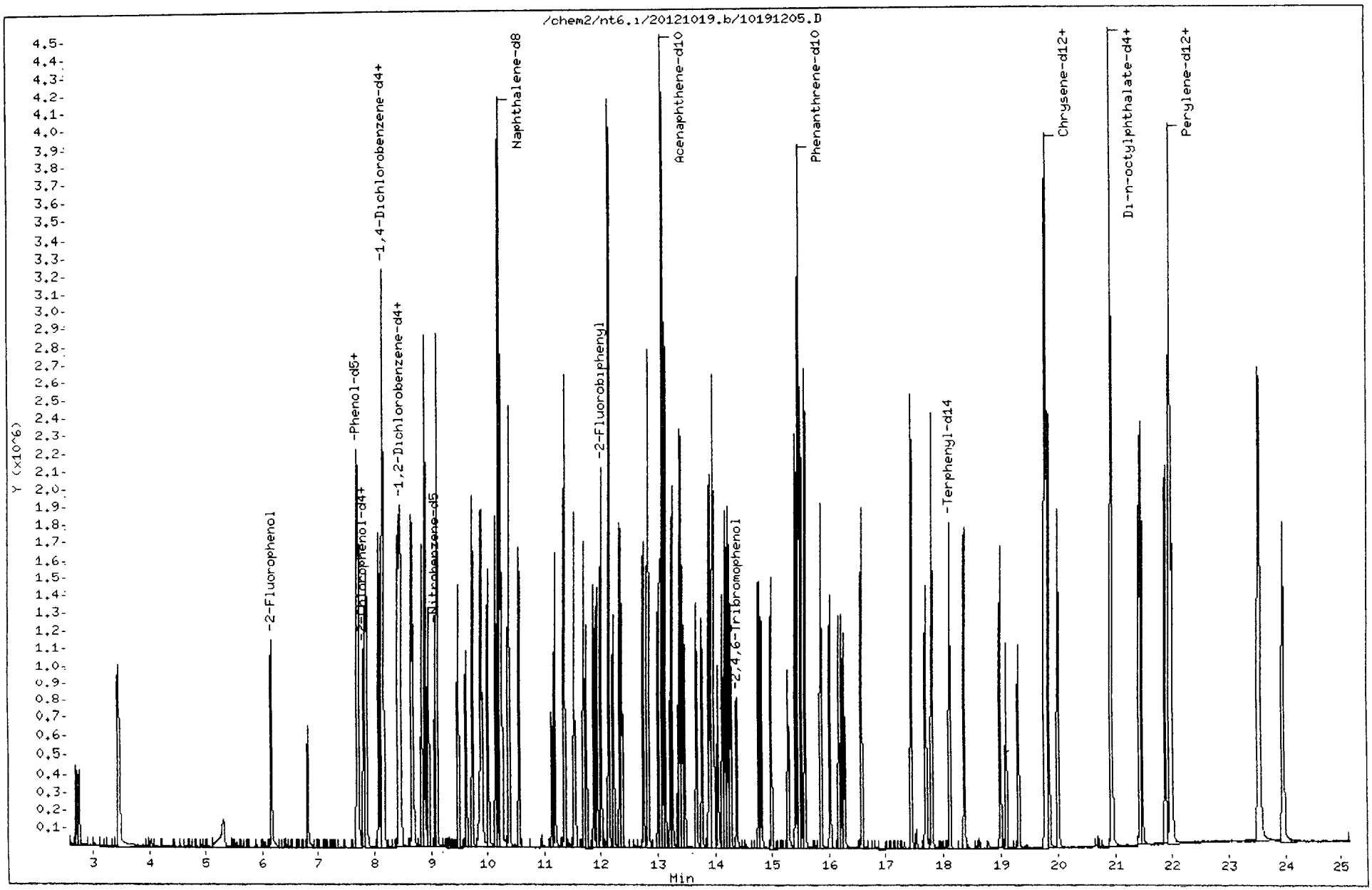
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem2/nt6.1/20121019.b/10191205.D
Date : 19-OCT-2012 18:37
Client ID: IC101019
Sample Info: IC101019,

Instrument: nt6.1

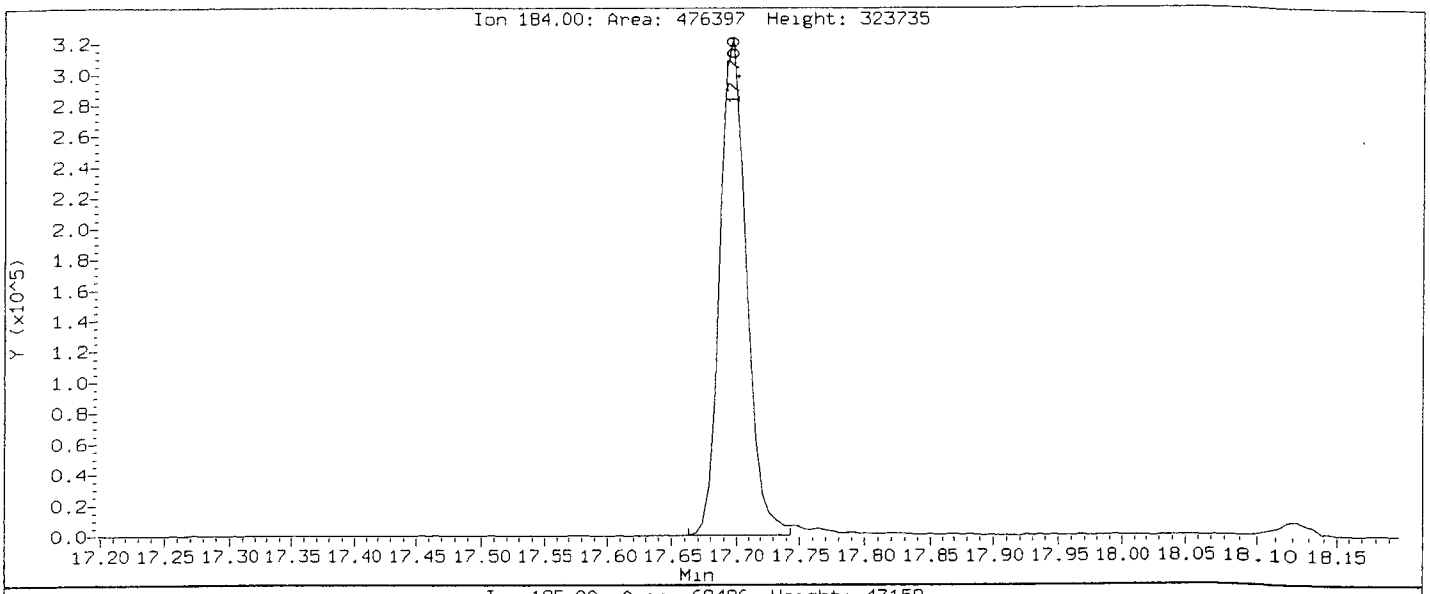
Operator: JZ
Column diameter: 0.32

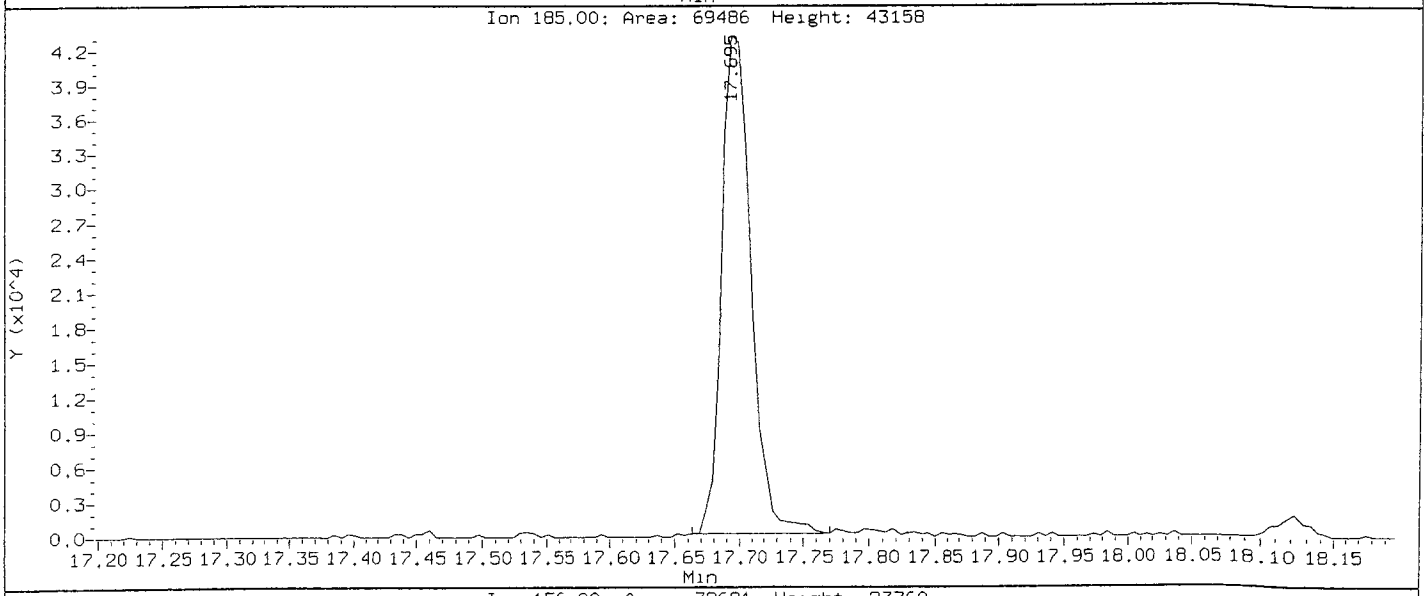
Column phase: ZB-5ms1

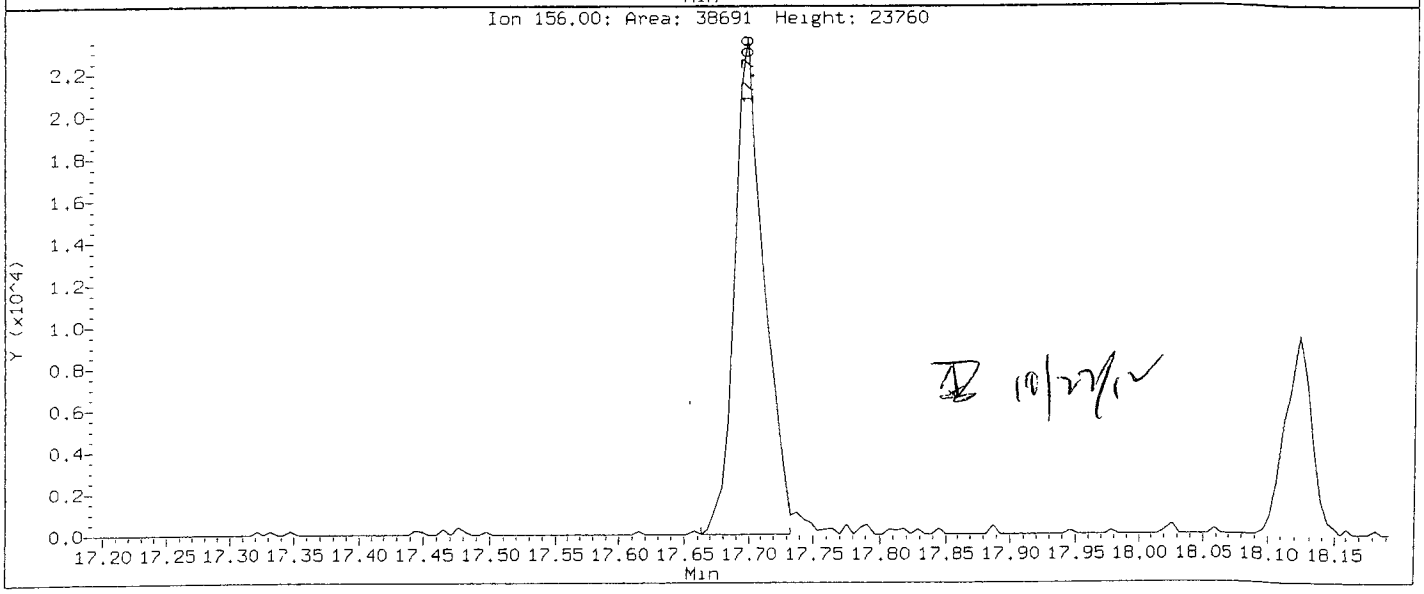


Data File: /chem2/nt6.i/20121019.b/10191205.D
Injection Date: 19-OCT-2012 18:37
Instrument: nt6.i
Client Sample ID:

Compound: Benzidine
CAS Number:



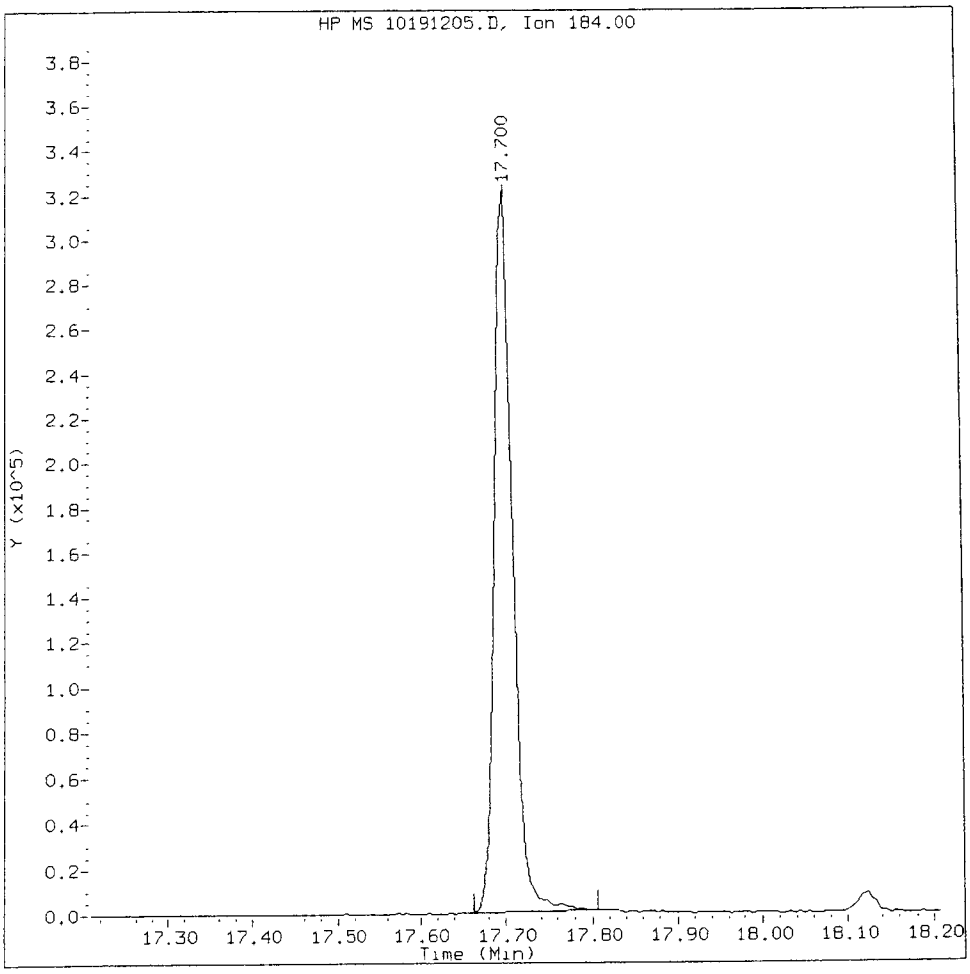




VPAA : 00272

IC101019, /chem2/nt6.i/20121019.b/10191205.D

Benzidine Amount: 9.68 Area: 481923



MANUAL INTEGRATION for Benzidine

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 10/27/12

CO-ELUTION SUMMARY FOR FILE - 10191205.D

Lab ID: IC101019, Method: SW846101912.m, Instrument: nt6.i, Date: 19-OCT-2012

RT	CO-ELUTION COMPOUNDS
19.778	3,3'-Dichlorobenzidine and Benzo(a)anthracene

checked ok

10/22/12

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121019.b/10191201.D
Lab Smp Id: IC251019 Client Smp ID: IC251019
Inj Date : 19-OCT-2012 16:20
Operator : JZ Inst ID: nt6.i
Smp Info : IC251019,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem2/nt6.i/20121019.b/SW846101912.m
Meth Date : 22-Oct-2012 10:34 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 16:20 Cal File: 10191201.D
Als bottle: 1 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

10/22/12

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6 170	6 179	(0.757)	1176086	25 0000	25.00
$	2 Phenol-d5	99	7 714	7.877	(0.947)	1438142	25 0000	25 00
	3 Phenol	94	7.735	7 744	(0 950)	1511004	25.0000	25 00
$	5 2-Chlorophenol-d4	132	7 847	7.861	(0.963)	1201349	25.0000	25.00
	4 Bis(2-Chloroethyl)ether	93	7 815	7 824	(0 959)	1219128	25 0000	25.00
	6 2-Chlorophenol	128	7 869	7.877	(0 966)	1267602	25.0000	25.00
	7 1,3-Dichlorobenzene	146	8 088	8 091	(0 993)	1468889	25 0000	25 00
*	8 1,4-Dichlorobenzene-d4	152	8 146	8 150	(1 000)	735905	20.0000	
	9 1,4-Dichlorobenzene	146	8 173	8.177	(1 003)	1452776	25.0000	25.00
$	10 1,2-Dichlorobenzene-d4	152	8.451	8 150	(1.037)	867809	25 0000	25 00
	12 1,2-Dichlorobenzene	146	8.467	8.476	(1.039)	1377631	25.0000	25.00
	11 Benzyl alcohol	108	8 430	8.449	(1.035)	1096671	25.0000	25 00
	14 2,2'-oxybis(1-Chloropropane)	45	8.691	8.700	(1.067)	1723079	25.0000	25.00
	13 2-Methylphenol	108	8.670	8 684	(1 064)	1151601	25.0000	25.00
	17 Hexachloroethane	117	8.964	8.967	(1 100)	572673	25.0000	25.00
	16 N-Nitroso-di-n-propylamine	70	8.910	8.930	(1.094)	856988	25 0000	25.00
	15 4-Methylphenol	108	8.900	8.919	(1 092)	1203077	25 0000	25.00
$	18 Nitrobenzene-d5	82	9.087	9.517	(0.890)	1345140	25.0000	25.00
	19 Nitrobenzene	77	9.113	9.122	(0.893)	1322774	25.0000	25.00
	20 Isophorone	82	9.498	9.517	(0 930)	2040966	25 0000	25.00
	21 2-Nitrophenol	139	9.632	9.640	(0.943)	661886	25.0000	25.00
	22 2,4-Dimethylphenol	107	9.744	9.758	(0 954)	1172275	25 0000	25.00
	23 Bis(2-Chloroethoxy)methane	93	9 888	9.902	(0.969)	1453082	25.0000	25.00
	24 Benzoic acid	105	9.979	10 100	(0 977)	1801307	50.0000	50.00
	25 2,4-Dichlorophenol	162	10 016	10 030	(0 981)	1008610	25.0000	25 00
	26 1,2,4-Trichlorobenzene	180	10 150	10 159	(0 994)	1151748	25.0000	25 00
*	27 Naphthalene-d8	136	10 209	10 212	(1 000)	2597762	20 0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10 241	10 249	(1 003)	3709892	25.0000	25.00
	29 4-Chloroaniline	127	10 379	10.394	(1 017)	1694304	25.0000	25.00
	30 Hexachlorobutadiene	225	10.561	10.565	(1.035)	703666	25.0000	25 00
	31 4-Chloro-3-methylphenol	107	11.197	11 206	(1.097)	979232	25.0000	25.00
	32 2-Methylnaphthalene	141	11 368	11.377	(1.114)	2289656	25.0000	25.00
	33 Hexachlorocyclopentadiene	237	11 752	11 756	(0.898)	729487	25 0000	25.00
	34 2,4,6-Trichlorophenol	196	11.886	11.889	(0 908)	715156	25.0000	25.00
	35 2,4,5-Trichlorophenol	196	11.939	11.948	(0 912)	770611	25.0000	25 00
$	36 2-Fluorobiphenyl	172	12 014	11.954	(0.918)	2388297	25.0000	25 00
	37 2-Chloronaphthalene	162	12.153	12.162	(0.929)	2059208	25 0000	25 00
	38 2-Nitroaniline	65	12 383	12 397	(0 946)	837136	25.0000	25 00
	39 Dimethylphthalate	163	12 757	12 776	(0.975)	2271249	25 0000	25.00
	40 Acenaphthylene	152	12.831	12 840	(0.980)	3677742	25 0000	25.00
	41 2,6-Dinitrotoluene	165	12.848	12.867	(0 982)	545161	25.0000	25.00
*	42 Acenaphthene-d10	164	13 088	13 091	(1.000)	1503943	20.0000	
	43 3-Nitroaniline	138	13 067	13.081	(0 998)	683612	25.0000	25 00
	44 Acenaphthene	153	13 136	13.150	(1.004)	2331193	25.0000	25.00
	45 2,4-Dinitrophenol	184	13.232	13.252	(1 011)	529197	50.0000	50.00
	46 Dibenzofuran	168	13.403	13 417	(1.024)	3664708	25.0000	25.00
	47 4-Nitrophenol	109	13.366	13 391	(1 021)	299392	25 0000	25.00
	48 2,4-Dinitrotoluene	165	13.483	13 503	(1.030)	717978	25.0000	25 00
	50 Diethylphthalate	149	13 916	13.930	(1.063)	2356175	25.0000	25 00
	49 Fluorene	166	13 964	13 973	(1 067)	2586443	25.0000	25 00
	51 4-Chlorophenyl-phenylether	204	13 985	13.989	(1 069)	1207559	25.0000	25 00
	52 4-Nitroaniline	138	14.066	14.096	(1 075)	660104	25.0000	25 00
	53 4,6-Dinitro-2-methylphenol	198	14 140	14.165	(0 914)	796393	50 0000	50 00
	54 N-Nitrosodiphenylamine	169	14.188	14.203	(0 917)	1771596	25 0000	25.00
$	55 2,4,6-Tribromophenol	330	14 386	14.395	(1 099)	324840	25.0000	25 00
	56 4-Bromophenyl-phenylether	248	14.771	14.774	(0.954)	708703	25.0000	25.00
	57 Hexachlorobenzene	284	14 995	14.999	(0 969)	733014	25 0000	25 00
	58 Pentachlorophenol	266	15 289	15.298	(0.988)	454578	25 0000	25.00
*	59 Phenanthrene-d10	188	15.476	15.479	(1.000)	2402003	20 0000	
	60 Phenanthrene	178	15 513	15.522	(1 002)	3456214	25 0000	25 00
	61 Anthracene	178	15 583	15.597	(1 007)	3609992	25 0000	25.00
	62 Carbazole	167	15 866	15.875	(1 025)	2852500	25.0000	25.00
	63 Di-n-butylphthalate	149	16 576	16.585	(1.071)	3642593	25 0000	25 00
	64 Fluoranthene	202	17 458	17.467	(1 128)	3804667	25.0000	25.00
	65 Pyrene	202	17 810	17.825	(0.899)	3924056	25.0000	25 00
$	66 Terphenyl-d14	244	18.126	18 124	(0 915)	2054131	25.0000	25.00
	67 Butylbenzylphthalate	149	19.007	19.016	(0.960)	1649655	25 0000	25.00
	68 Benzo(a)anthracene	228	19.776	19.796	(0 999)	3460945	25.0000	25.00
*	69 Chrysene-d12	240	19 803	19 817	(1 000)	2331938	20 0000	
	70 3,3'-Dichlorobenzidine	252	19.782	19 790	(0.999)	999206	25.0000	25.00
	71 Chrysene	228	19 846	19.860	(1.002)	3397631	25.0000	25.00
	72 bis(2-Ethylhexyl)phthalate	149	20.001	20.004	(0 955)	2177099	25 0000	25.00
*	134 Di-n-octylphthalate-d4	153	20.936	20.939	(1.000)	2790605	20.0000	
	73 Di-n-octylphthalate	149	20 946	20.950	(1 000)	3648255	25 0000	25 00

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	21 438	21.457	(0.976)	3667648	25.0000	25.00
75	Benzo(k)fluoranthene	252	21.475	21.457	(0.977)	4007991	25.0000	25.00
187	Total Benzofluoranthenes	252	21 475	21.495	(0.977)	7290724	50.0000	50.00
76	Benzo(a)pyrene	252	21 892	21 906	(0.996)	3507103	25.0000	25.00
* 77	Perylene-d12	264	21 972	21.975	(1 000)	2485610	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	23.542	23.567	(1.071)	4749820	25 0000	25.00
79	Dibenzo(a,h)anthracene	278	23.564	23 599	(1.072)	3860817	25.0000	25.00
80	Benzo(g,h,i)perylene	276	23 981	24.021	(1.091)	4130375	25.0000	25.00
90	N-Nitrosodimethylamine	74	3.472	3 545	(0.426)	788736	25.0000	25 00
103	Pyridine	79	3 440	3.502	(0.422)	1364300	25.0000	25.00
91	Aniline	93	7.698	7.707	(0.945)	2234263	25.0000	25.00
105	1-methylnaphthalene	141	11 539	11.547	(1.130)	1638538	25.0000	25.00
93	Benzidine	184	17.698	17.707	(0.894)	1098481	25.0000	25.00
111	Azobenzene (1,2-DP-Hydrazine)	77	14.236	14 251	(1.088)	2410621	25.0000	25.00
143	1,4-Dioxane	88	2 751	2.792	(0.338)	560700	25.0000	25.00
$ 137	d8-1,4-Dioxane	96	2.697	2.738	(0 331)	567882	25.0000	25.00
144	alpha-Terpineol	59	10 262	10.276	(1.005)	862099	25.0000	25.00
177	p-Benzoquinone	82	6 816	6.825	(0.668)	266132	25.0000	25.00
98	Retene	219	18 377	18.380	(0 928)	1482976	25.0000	25.00
99	Perylene	252	22 004	21.906	(1 001)	2805574	25.0000	25 00
133	Butylatedhydroxytoluene	205	13.259	13.268	(1 013)	1751511	25.0000	25 00
115	Tributyl Phosphate	99	14.285	14.309	(0 923)	2390250	25.0000	25.00
116	Dibutyl Phenyl Phosphate	175	16 026	16.046	(1.036)	1656636	25.0000	25.00
117	Butyl Diphenyl Phosphate	94	17.714	17.718	(0 895)	516469	25.0000	25 00
118	Triphenyl Phosphate	326	19 322	19 331	(0 976)	504467	25.0000	25.00
123	Acetophenone	105	8.846	8.860	(1.086)	1616222	25.0000	25 00
168	Pentachlorobenzene	250	13.441	13.455	(1 027)	912701	25.0000	25.00
113	Diphenyl Oxide	170	12 340	12.349	(0.943)	1519653	25.0000	25.00
112	Biphenyl	154	12.148	12.156	(0.928)	2455795	25.0000	25.00
120	2,3,4,6-Tetrachlorophenol	232	13.681	13 695	(1.045)	649395	25.0000	25.00
151	1,2,4,5-Tetrachlorobenzene	216	11 710	11.713	(0 895)	1047276	25.0000	25.00
110	Tetrachloroguaiacol	247	15.417	15.437	(0.996)	716212	50.0000	50.00
109	3,4,5-Trichloroguaiacol	213	13.782	13.791	(0 891)	369607	25.0000	25.00 (H)
181	3,4,6-Trichloroguaiacol	211	13.900	13.914	(1.706)	448068	25.0000	25.00
108	4,5,6-Trichloroguaiacol	213	14.819	14.828	(1.132)	372907	25.0000	25.00
184	3,4-Dichloroguaiacol	192	12 233	12.237	(1.502)	403154	25.0000	25.00
107	4,5-Dichloroguaiacol	192	13.018	13.033	(0 995)	993657	50.0000	50.00
182	4,6-Dichloroguaiacol	192	13.018	13.033	(1 598)	993657	50 0000	50.00
185	4-Chloroguaiacol	115	11.138	11.147	(1 367)	255219	12 5000	12.50
186	Carbaryl	144	16.277	16.297	(1 052)	1423656	25 0000	25 00
178	2-Benzyl-4-Chlorophenol	218	16.234	16.254	(1 049)	540487	25 0000	25 00
106	Guaiacol	124	9 113	9 128	(1 119)	1011501	25 0000	25.00
189	N-Nitrosomethylethylamine	88	5 315	5 329	(0 652)	308222	25.0000	25.00
188	2,6-Dichlorophenol	162	10 395	10.404	(1 276)	842317	25.0000	25 00

QC Flag Legend

H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 10191201.D
Lab Smp Id: IC251019
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Misc Info: 12-

Calibration Date: 19-OCT-2012
Calibration Time: 16:20
Client Smp ID: IC251019
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	735905	0.00
27 Naphthalene-d8	2597762	1298881	5195524	2597762	0.00
42 Acenaphthene-d10	1503943	751972	3007886	1503943	0.00
59 Phenanthrene-d10	2402003	1201002	4804006	2402003	0.00
69 Chrysene-d12	2331938	1165969	4663876	2331938	0.00
134 Di-n-octylphthala	2790605	1395302	5581210	2790605	0.00
77 Perylene-d12	2485610	1242805	4971220	2485610	0.00

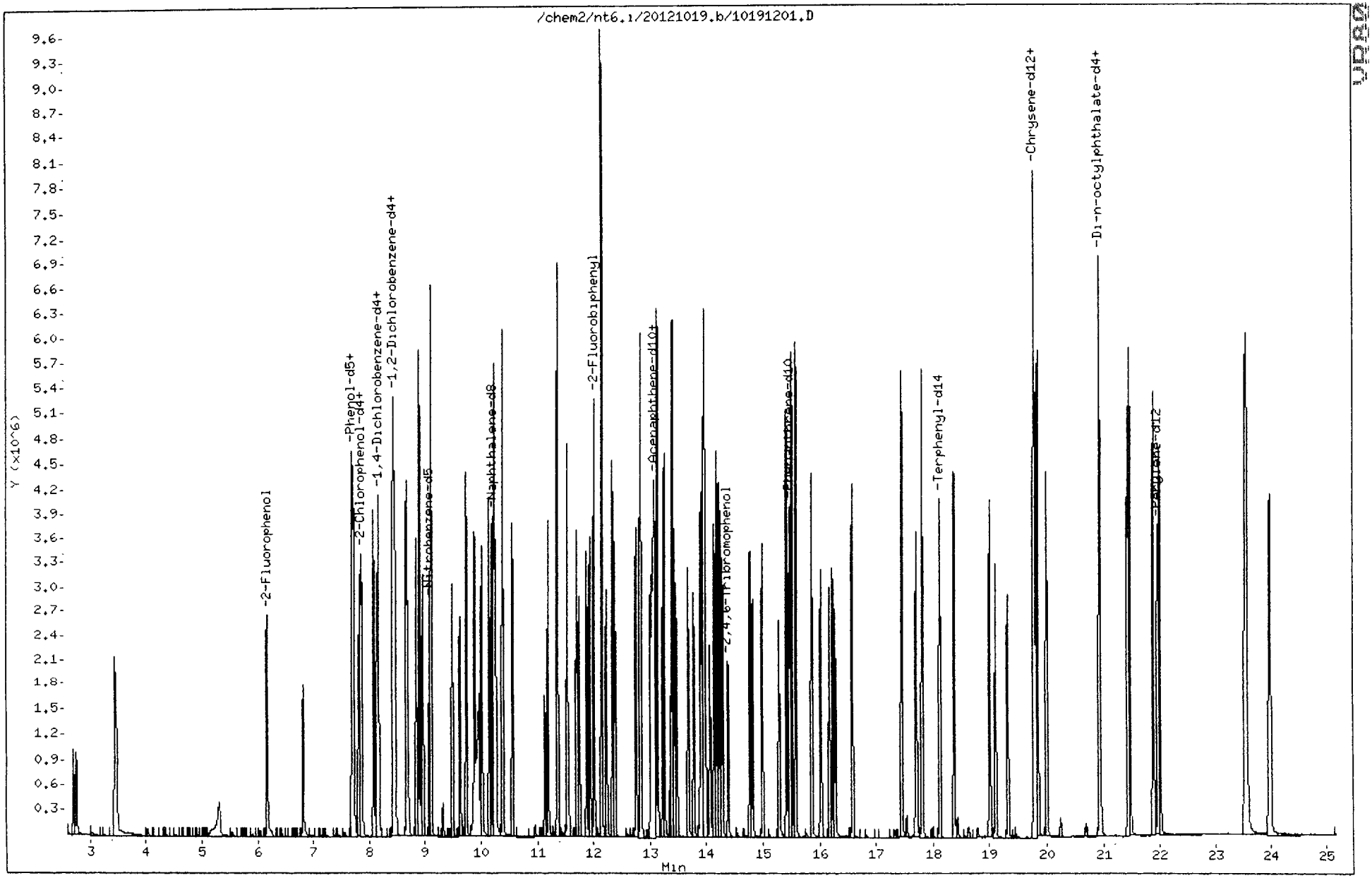
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.15	7.65	8.65	8.15	0.00
27 Naphthalene-d8	10.21	9.71	10.71	10.21	0.00
42 Acenaphthene-d10	13.09	12.59	13.59	13.09	0.00
59 Phenanthrene-d10	15.48	14.98	15.98	15.48	0.00
69 Chrysene-d12	19.80	19.30	20.30	19.80	0.00
134 Di-n-octylphthala	20.94	20.44	21.44	20.94	0.00
77 Perylene-d12	21.97	21.47	22.47	21.97	0.00

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

Data File: /chem2/nt6.1/20121019.b/10191201.D
Date : 19-OCT-2012 16:20
Client ID: IC251019
Sample Info: IC251019,

Instrument: nt6.1
Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



CO-ELUTION SUMMARY FOR FILE - 10191201.D

Lab ID: IC251019, Method: SW846101912.m, Instrument: nt6.i, Date: 19-OCT-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121019.b/10191206.D
Lab Smp Id: IC401019 Client Smp ID: IC401019
Inj Date : 19-OCT-2012 19:12
Operator : JZ Inst ID: nt6.i
Smp Info : IC401019,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem2/nt6.i/20121019.b/SW846101912.m
Meth Date : 22-Oct-2012 10:34 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 19:12 Cal File: 10191206.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

10/22/12

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.172	6.179	(0 757)	1803448	40.0000	37.37
$	2 Phenol-d5	99	7 716	7 877	(0 947)	2207817	40.0000	36.77
	3 Phenol	94	7.738	7 744	(0 950)	2307603	40.0000	35.93
$	5 2-Chlorophenol-d4	132	7.850	7.861	(0.963)	1839238	40 0000	37.04
	4 Bis(2-Chloroethyl)ether	93	7 818	7 824	(0 959)	1884796	40.0000	36.74
	6 2-Chlorophenol	128	7.871	7.877	(0 966)	1966656	40 0000	36 64
	7 1,3-Dichlorobenzene	146	8.085	8.091	(0 992)	2200085	40.0000	36.40
*	8 1,4-Dichlorobenzene-d4	152	8 149	8.150	(1 000)	713803	20.0000	
	9 1,4-Dichlorobenzene	146	8.176	8.177	(1.003)	2202125	40.0000	36 86
$	10 1,2-Dichlorobenzene-d4	152	8.448	8.150	(1.037)	1284772	40.0000	35.53
	12 1,2-Dichlorobenzene	146	8 469	8.476	(1.039)	2063355	40 0000	36.05
	11 Benzyl alcohol	108	8.437	8.449	(1.035)	1592932	40.0000	37.80
	14 2,2'-oxybis(1-Chloropropane)	45	8.694	8 700	(1 067)	2644389	40.0000	36.26
	13 2-Methylphenol	108	8.672	8.684	(1.064)	1814312	40.0000	36.95
	17 Hexachloroethane	117	8.961	8.967	(1.100)	885842	40.0000	37 69
	16 N-Nitroso-di-n-propylamine	70	8.918	8.930	(1.094)	1337547	40.0000	37.17
	15 4-Methylphenol	108	8.907	8.919	(1 093)	1874098	40.0000	37.06
$	18 Nitrobenzene-d5	82	9.089	9.517	(0.891)	2094849	40.0000	37.77
	19 Nitrobenzene	77	9 116	9 122	(0 893)	2002979	40.0000	35.22
	20 Isophorone	82	9 500	9.517	(0 931)	3121264	40.0000	36.06
	21 2-Nitrophenol	139	9 634	9.640	(0 944)	1069462	40.0000	39.65
	22 2,4-Dimethylphenol	107	9 746	9.758	(0.955)	1831887	40.0000	36.20
	23 Bis(2-Chloroethoxy)methane	93	9.896	9 902	(0 970)	2229684	40.0000	35 83
	24 Benzoic acid	105	10.019	10 100	(0 982)	3010924	80.0000	95 71
	25 2,4-Dichlorophenol	162	10 019	10 030	(0 982)	1565888	40.0000	37 50
	26 1,2,4-Trichlorobenzene	180	10.152	10.159	(0 995)	1741386	40.0000	36.30
*	27 Naphthalene-d8	136	10 206	10 212	(1 000)	2602197	20.0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10 243	10.249	(1.004)	5316965	40.0000	32.71
	29 4-Chloroaniline	127	10.387	10.394	(1 018)	2150065	40.0000	29.91
	30 Hexachlorobutadiene	225	10.558	10 565	(1 035)	1062293	40.0000	36.85
	31 4-Chloro-3-methylphenol	107	11.199	11 206	(1 097)	1553507	40.0000	38.67
	32 2-Methylnaphthalene	141	11 370	11 377	(1 114)	3256727	40.0000	34.45
	33 Hexachlorocyclopentadiene	237	11 749	11 756	(0 898)	1154865	40.0000	42.25
	34 2,4,6-Trichlorophenol	196	11 883	11 889	(0.908)	1122905	40.0000	38.74
	35 2,4,5-Trichlorophenol	196	11 942	11.948	(0 912)	1217490	40 0000	40 38
$	36 2-Fluorobiphenyl	172	12.017	11.954	(0 918)	3612950	40.0000	35.44
	37 2-Chloronaphthalene	162	12 155	12 162	(0 929)	2994423	40.0000	33.35
	38 2-Nitroaniline	65	12 385	12 397	(0 946)	1259751	40.0000	39.51
	39 Dimethylphthalate	163	12 759	12 776	(0 975)	3450715	40 0000	36.29
	40 Acenaphthylene	152	12.834	12.840	(0.980)	5333960	40.0000	33.33
	41 2,6-Dinitrotoluene	165	12.855	12.867	(0 982)	852573	40.0000	39.83
*	42 Acenaphthene-d10	164	13.090	13.091	(1.000)	1494348	20.0000	
	43 3-Nitroaniline	138	13.069	13 081	(0.998)	841873	40.0000	30.86
	44 Acenaphthene	153	13.144	13 150	(1 004)	3484717	40.0000	34.31
	45 2,4-Dinitrophenol	184	13.235	13.252	(1.011)	924962	80 0000	106.9
	46 Dibenzofuran	168	13 406	13 417	(1.024)	5090526	40.0000	33.59
	47 4-Nitrophenol	109	13.373	13.391	(1 022)	478867	40.0000	42.81
	48 2,4-Dinitrotoluene	165	13.486	13 503	(1.030)	1114328	40.0000	40.70
	50 Diethylphthalate	149	13.924	13.930	(1.064)	3533288	40.0000	35.30
	49 Fluorene	166	13 966	13.973	(1.067)	3833688	40.0000	34.66
	51 4-Chlorophenyl-phenylether	204	13 988	13.989	(1.069)	1827410	40.0000	35.89
	52 4-Nitroaniline	138	14.073	14.096	(1 075)	973188	40.0000	37.84
	53 4,6-Dinitro-2-methylphenol	198	14.148	14.165	(0.914)	1304713	80.0000	89.23
	54 N-Nitrosodiphenylamine	169	14.196	14.203	(0 917)	2698404	40.0000	35 91
$	55 2,4,6-Tribromophenol	330	14.389	14 395	(1 099)	525087	40.0000	41.44
	56 4-Bromophenyl-phenylether	248	14.768	14.774	(0.954)	1094602	40 0000	37.04
	57 Hexachlorobenzene	284	14.992	14 999	(0 969)	1123655	40.0000	36 48
	58 Pentachlorophenol	266	15 291	15.298	(0 988)	735611	40.0000	45.21
*	59 Phenanthrene-d10	188	15.473	15 479	(1.000)	2346191	20.0000	
	60 Phenanthrene	178	15 516	15 522	(1 003)	5114656	40 0000	33.91
	61 Anthracene	178	15.590	15 597	(1.008)	5266126	40.0000	33.80
	62 Carbazole	167	15.868	15.875	(1 026)	4180877	40.0000	33 96
	63 Di-n-butylphthalate	149	16.579	16 585	(1 071)	5300680	40.0000	34 24
	64 Fluoranthene	202	17 460	17.467	(1 128)	5488154	40.0000	34 81
	65 Pyrene	202	17 818	17.825	(0 899)	5639993	40.0000	33.18
$	66 Terphenyl-d14	244	18 123	18.124	(0.915)	3106675	40.0000	35 72
	67 Butylbenzylphthalate	149	19 009	19 016	(0 960)	2476309	40.0000	36.95
	68 Benzo(a)anthracene	228	19.784	19 796	(0 999)	5099369	40.0000	34.65
*	69 Chrysene-d12	240	19.811	19.817	(1.000)	2310828	20 0000	
	70 3,3'-Dichlorobenzidine	252	19 784	19 790	(0 999)	1272577	40.0000	31 39
	71 Chrysene	228	19.848	19 860	(1.002)	4968456	40 0000	34.32
	72 bis(2-Ethylhexyl)phthalate	149	20.003	20.004	(0.956)	3296486	40.0000	36.88
*	134 Di-n-octylphthalate-d4	153	20 933	20.939	(1.000)	2715395	20.0000	
	73 Di-n-octylphthalate	149	20 949	20 950	(1.001)	5362650	40.0000	35.25

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	21.445	21.457	(0.976)	5658870	40 0000	36.32
75	Benzo(k)fluoranthene	252	21.483	21.457	(0 978)	5495873	40.0000	33.34
187	Total Benzofluoranthenes	252	21.483	21.495	(0.978)	10508717	80 0000	67.94
76	Benzo(a)pyrene	252	21 894	21.906	(0 997)	5164279	40.0000	35 23
* 77	Perylene-d12	264	21.969	21.975	(1.000)	2481608	20 0000	
78	Indeno(1,2,3-cd)pyrene	276	23.550	23.567	(1 072)	7038006	40.0000	35.40
79	Dibenzo(a,h)anthracene	278	23.577	23.599	(1.073)	5659753	40 0000	34.61
80	Benzo(g,h,i)perylene	276	23 994	24 021	(1 092)	6200172	40.0000	35.68
90	N-Nitrosodimethylamine	74	3.485	3.545	(0 428)	1253294	40.0000	38.41
103	Pyridine	79	3 448	3.502	(0.423)	2144655	40 0000	38.46
91	Aniline	93	7.700	7.707	(0 945)	3176089	40.0000	35.32
105	1-methylnaphthalene	141	11.541	11 547	(1 131)	2407952	40 0000	36.27
93	Benzidine	184	17.701	17 707	(0 893)	1315452	40.0000	28.58
111	Azobenzene (1,2-DP-Hydrazine)	77	14.239	14 251	(1.088)	3648001	40.0000	35.31
143	1,4-Dioxane	88	2.759	2 792	(0 339)	887676	40.0000	38.10
$ 137	d8-1,4-Dioxane	96	2.705	2 738	(0.332)	901683	40.0000	38.96
144	alpha-Terpineol	59	10.270	10.276	(1.006)	1285813	40.0000	37.62
177	p-Benzoquinone	82	6.819	6 825	(0 668)	434136	40.0000	45.94
98	Retene	219	18.374	18.380	(0 927)	2285898	40 0000	37.49
99	Perylene	252	22 006	21.906	(1.002)	4060113	40.0000	35.29
133	Butylatedhydroxytoluene	205	13 261	13.268	(1 013)	2634418	40.0000	35.88
115	Tributyl Phosphate	99	14.287	14.309	(0 923)	3672612	40 0000	36.47
116	Dibutyl Phenyl Phosphate	175	16.029	16.046	(1.036)	2587221	40 0000	38.75
117	Butyl Diphenyl Phosphate	94	17 711	17.718	(0 894)	800606	40.0000	36.81
118	Triphenyl Phosphate	326	19.325	19.331	(0.975)	799560	40 0000	39.99
123	Acetophenone	105	8.849	8.860	(1.086)	2458982	40.0000	36.86
168	Pentachlorobenzene	250	13.448	13.455	(1 027)	1389054	40.0000	36.59
113	Diphenyl Oxide	170	12.342	12.349	(0 943)	2337832	40.0000	37.06
112	Biphenyl	154	12.150	12 156	(0.928)	3375754	40 0000	33.43
120	2,3,4,6-Tetrachlorophenol	232	13.689	13.695	(1.046)	1017062	40.0000	41.35
151	1,2,4,5-Tetrachlorobenzene	216	11.707	11.713	(0.894)	1593739	40.0000	36.49
110	Tetrachloroguaiacol	247	15.425	15 437	(0 997)	1122288	80.0000	77.40
109	3,4,5-Trichloroguaiacol	213	13.785	13 791	(0 891)	575755	40 0000	37.71
181	3,4,6-Trichloroguaiacol	211	13.902	13.914	(1.706)	703648	40.0000	39.83
108	4,5,6-Trichloroguaiacol	213	14.821	14 828	(1.132)	592412	40.0000	39.91
184	3,4-Dichloroguaiacol	192	12.230	12.237	(1.501)	640385	40.0000	39.51
107	4,5-Dichloroguaiacol	192	13.021	13.033	(0.995)	1560001	80 0000	77.33
182	4,6-Dichloroguaiacol	192	13.021	13 033	(1 598)	1560586	80.0000	79.71
185	4-Chloroguaiacol	115	11.140	11.147	(1.367)	398649	20.0000	19.43
186	Carbaryl	144	16.285	16 297	(1.052)	2326140	40.0000	42.68
178	2-Benzyl-4-Chlorophenol	218	16.242	16.254	(1.050)	856463	40.0000	41.37
106	Guaiacol	124	9 116	9.128	(1 119)	1549336	40.0000	37.33
189	N-Nitrosomethylethylamine	88	5.318	5.329	(0 653)	691911	40.0000	53.67
188	2,6-Dichlorophenol	162	10 398	10 404	(1.276)	1400007	40 0000	40.49

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 10191206.D
Lab Smp Id: IC401019
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Misc Info: 12-

Calibration Date: 19-OCT-2012
Calibration Time: 16:20
Client Smp ID: IC401019
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	713803	-3.00
27 Naphthalene-d8	2597762	1298881	5195524	2602197	0.17
42 Acenaphthene-d10	1503943	751972	3007886	1494348	-0.64
59 Phenanthrene-d10	2402003	1201002	4804006	2346191	-2.32
69 Chrysene-d12	2331938	1165969	4663876	2310828	-0.91
134 Di-n-octylphthala	2790605	1395302	5581210	2715395	-2.70
77 Perylene-d12	2485610	1242805	4971220	2481608	-0.16

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.15	7.65	8.65	8.15	0.03
27 Naphthalene-d8	10.21	9.71	10.71	10.21	-0.03
42 Acenaphthene-d10	13.09	12.59	13.59	13.09	0.02
59 Phenanthrene-d10	15.48	14.98	15.98	15.47	-0.02
69 Chrysene-d12	19.80	19.30	20.30	19.81	0.04
134 Di-n-octylphthala	20.94	20.44	21.44	20.93	-0.01
77 Perylene-d12	21.97	21.47	22.47	21.97	-0.01

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

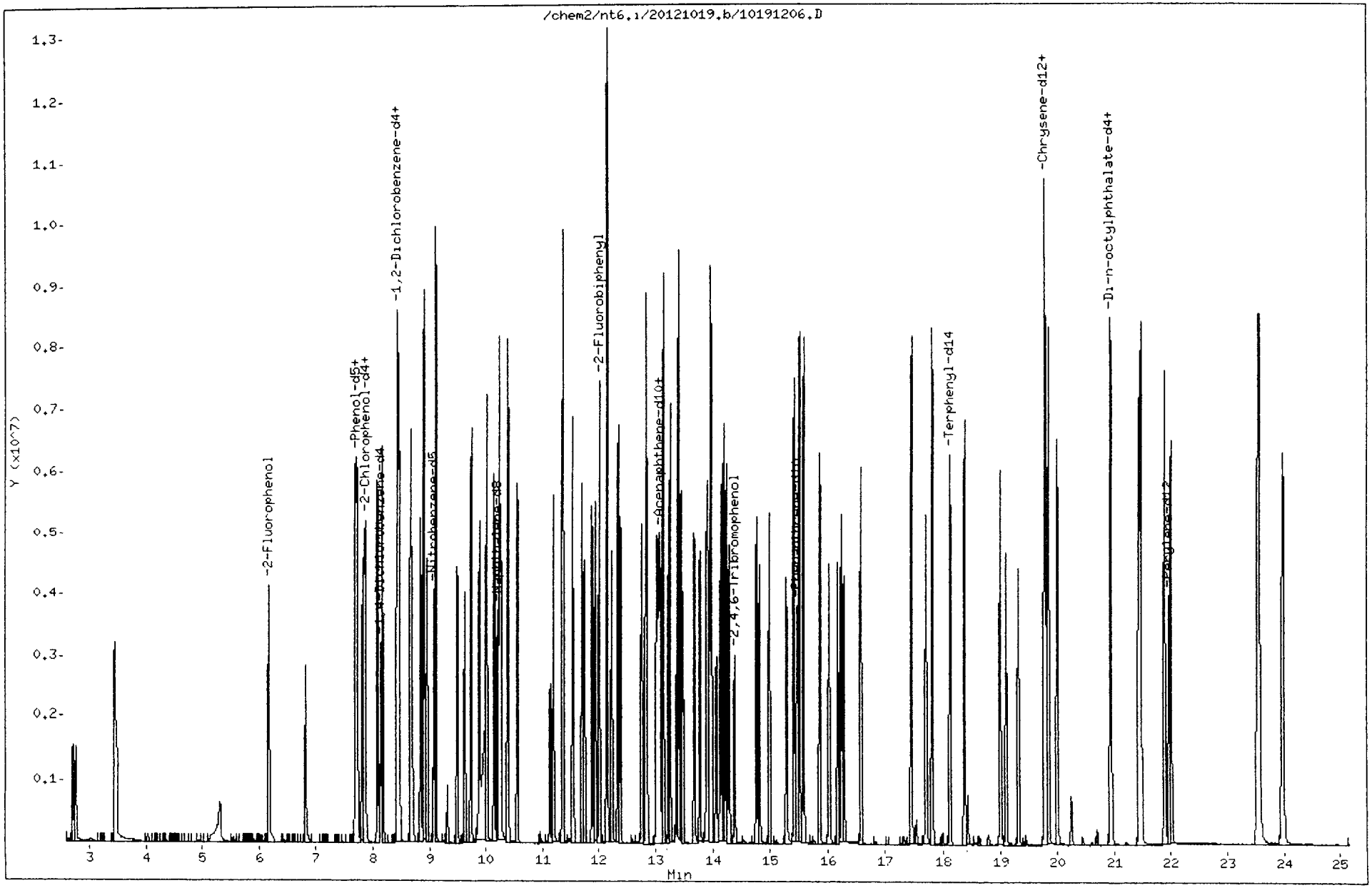
Data File: /chem2/nt6.i/20121019.b/10191206.D
Date : 19-OCT-2012 19:12
Client ID: IC401019
Sample Info: IC401019,

Instrument: nt6.i

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 10191206.D

Lab ID: IC401019, Method: SW846101912.m, Instrument: nt6.i, Date: 19-OCT-2012

RT	CO-ELUTION COMPOUNDS
19.784	3,3'-Dichlorobenzidine and Benzo(a)anthracene

checked ok

10/22/12

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121019.b/10191207.D
Lab Smp Id: IC601019 Client Smp ID: IC601019
Inj Date : 19-OCT-2012 19:46
Operator : JZ Inst ID: nt6.i
Smp Info : IC601019,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem2/nt6.i/20121019.b/SW846101912.m
Meth Date : 22-Oct-2012 10:34 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 19:46 Cal File: 10191207.D
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

10/22/12

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	6.184	6.179	(0 759)	3258145	60 0000	55.31
$	2 Phenol-d5	99	7 728	7 877	(0 948)	3990814	60 0000	54 58
	3 Phenol	94	7.749	7.744	(0.951)	3980043	60.0000	51.42
$	5 2-Chlorophenol-d4	132	7 856	7 861	(0 964)	3308953	60.0000	54 71
	4 Bis(2-Chloroethyl)ether	93	7 824	7.824	(0 960)	3196977	60 0000	51.66
	6 2-Chlorophenol	128	7.883	7 877	(0 967)	3304542	60.0000	51.13
	7 1,3-Dichlorobenzene	146	8.091	8 091	(0 993)	3681364	60.0000	50 67
*	8 1,4-Dichlorobenzene-d4	152	8 150	8.150	(1 000)	884875	20 0000	
	9 1,4-Dichlorobenzene	146	8.182	8 177	(1 004)	3616278	60 0000	50.39
$	10 1,2-Dichlorobenzene-d4	152	8.455	8.150	(1.037)	2170376	60 0000	50.02
	12 1,2-Dichlorobenzene	146	8.476	8 476	(1 040)	3337527	60.0000	48.80
	11 Benzyl alcohol	108	8 449	8 449	(1.037)	2815673	60.0000	54 83
	14 2,2'-oxybis(1-Chloropropane)	45	8 700	8 700	(1 067)	4321553	60.0000	49 48
	13 2-Methylphenol	108	8.684	8.684	(1 066)	3052253	60.0000	51 55
	17 Hexachloroethane	117	8 967	8.967	(1 100)	1503484	60.0000	52.84
	16 N-Nitroso-di-n-propylamine	70	8.930	8 930	(1.096)	2327599	60 0000	53.34
	15 4-Methylphenol	108	8 919	8 919	(1 094)	3128680	60.0000	51.34
$	18 Nitrobenzene-d5	82	9.096	9.517	(0 891)	3814493	60.0000	57.22
	19 Nitrobenzene	77	9.128	9.122	(0 894)	3339238	60.0000	50.01
	20 Isophorone	82	9 512	9.517	(0.931)	5404199	60.0000	52.72
	21 2-Nitrophenol	139	9 641	9.640	(0.944)	1891774	60.0000	58.16
	22 2,4-Dimethylphenol	107	9 753	9 758	(0 955)	3111025	60.0000	52.02
	23 Bis(2-Chloroethoxy)methane	93	9.902	9 902	(0.970)	3825223	60.0000	52.01
	24 Benzoic acid	105	10 079	10 100	(0.987)	5468571	120 000	138.8
	25 2,4-Dichlorophenol	162	10.030	10 030	(0.982)	2675387	60.0000	53.89
	26 1,2,4-Trichlorobenzene	180	10 159	10 159	(0.995)	3017352	60 0000	53 05
*	27 Naphthalene-d8	136	10 212	10 212	(1.000)	3156975	20 0000	

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	28 Naphthalene	128	10 250	10 249	(1.004)	7846050	60.0000	42.15
	29 4-Chloroanıline	127	10 394	10 394	(1 018)	3252887	60.0000	39.80
	30 Hexachlorobutadıene	225	10.565	10.565	(1 035)	1854003	60.0000	54.06
	31 4-Chloro-3-methylphenol	107	11.206	11.206	(1.097)	2649620	60.0000	55.23
	32 2-Methylnaphthalene	141	11.377	11.377	(1.114)	5218014	60 0000	47.41
	33 Hexachlorocyclopentadıene	237	11 751	11.756	(0 898)	2142919	60 0000	65.66
	34 2,4,6-Trıchlorophenol	196	11.890	11.889	(0 908)	1946344	60 0000	57.76
	35 2,4,5-Trıchlorophenol	196	11 948	11 948	(0.913)	2123293	60.0000	60.10
$	36 2-Fluorobiphenyl	172	12.023	11 954	(0.918)	6000588	60.0000	51.65
	37 2-Chloronaphthalene	162	12.162	12.162	(0 929)	4788096	60.0000	47.43
	38 2-Nitroanılıne	65	12.397	12 397	(0 947)	2182965	60 0000	58.71
	39 Dımethylphthalate	163	12.771	12 776	(0.976)	5616105	60.0000	51.81
	40 Acenaphthylene	152	12 840	12 840	(0.981)	7933384	60.0000	44.52
	41 2,6-Dınitrotoluene	165	12.862	12.867	(0 982)	1450646	60 0000	58.21
*	42 Acenaphthene-d10	164	13 092	13 091	(1 000)	1750239	20.0000	
	43 3-Nitroanılıne	138	13.081	13.081	(0 999)	1099291	60.0000	34.40
	44 Acenaphthene	153	13.145	13.150	(1.004)	5396026	60.0000	47.28
	45 2,4-Dınitrophenol	184	13 246	13 252	(1.012)	1706717	120.000	155 8
	46 Dıbenzofuran	168	13 412	13 417	(1.024)	7879527	60.0000	46.41
	47 4-Nitrophenol	109	13.385	13.391	(1 022)	783783	60.0000	59.85
	48 2,4-Dinıtrotoluene	165	13.498	13.503	(1.031)	1869430	60.0000	58.57
	50 Dıethylphthalate	149	13 930	13 930	(1.064)	5532795	60.0000	48.94
	49 Fluorene	166	13.973	13 973	(1.067)	5825321	60.0000	46.93
	51 4-Chlorophenyl-phenylether	204	13 989	13.989	(1.069)	2959463	60.0000	51 10
	52 4-Nitroanıline	138	14 091	14.096	(1.076)	1675873	60.0000	56.31
	53 4,6-Dinitro-2-methylphenol	198	14 165	14.165	(0.915)	2247046	120.000	131.8
	54 N-Nıtrosodiphenylamıne	169	14.203	14.203	(0.918)	4283367	60.0000	51.54
$	55 2,4,6-Trıbromophenol	330	14.395	14.395	(1.100)	921137	60 0000	61.71
	56 4-Bromophenyl-phenylether	248	14.774	14.774	(0.954)	1828119	60 0000	55.26
	57 Hexachlorobenzene	284	14.999	14.999	(0.969)	1836226	60.0000	53.55
	58 Pentachlorophenol	266	15 298	15.298	(0.988)	1247276	60.0000	66 04
*	59 Phenanthrene-d10	188	15 479	15 479	(1.000)	2668096	20.0000	
	60 Phenanthrene	178	15 522	15 522	(1 003)	7580416	60.0000	46.22
	61 Anthracene	178	15.597	15.597	(1 008)	7594123	60.0000	45.01
	62 Carbazole	167	15.875	15.875	(1.026)	6359263	60.0000	47 34
	63 Dı-n-butylphthalate	149	16.585	16.585	(1 071)	7583245	60.0000	45 20
	64 Fluoranthene	202	17 467	17 467	(1.128)	7911298	60.0000	46.16
	65 Pyrene	202	17 825	17 825	(0 900)	8133293	60.0000	45.45
$	66 Terphenyl-d14	244	18 129	18.124	(0.915)	4997286	60 0000	53 23
	67 Butylbenzylphthalate	149	19.011	19.016	(0.960)	3756474	60.0000	52.11
	68 Benzo(a)anthracene	228	19 791	19.796	(0 999)	7684249	60 0000	49 03
*	69 Chrysene-d12	240	19 812	19 817	(1 000)	2550867	20 0000	
	70 3,3'-Dichlorobenzıdine	252	19.791	19 790	(0 999)	1932972	60.0000	45 31
	71 Chrysene	228	19 855	19.860	(1.002)	7253225	60.0000	47.31
	72 bıs(2-Ethylhexyl)phthalate	149	20 004	20.004	(0.956)	4915857	60 0000	52 86
*	134 Dı-n-octylphthalate-d4	153	20.934	20.939	(1.000)	2892143	20 0000	
	73 Dı-n-octylphthalate	149	20 950	20 950	(1.001)	7749726	60 0000	49.50

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
74	Benzo(b)fluoranthene	252	21.452	21 457	(0 976)	8298592	60.0000	49.62
75	Benzo(k)fluoranthene	252	21.489	21 457	(0.978)	7969052	60 0000	45.62
187	Total Benzofluoranthenes	252	21 489	21 495	(0.978)	15301884	120.000	93.10
76	Benzo(a)pyrene	252	21 906	21.906	(0.997)	7723682	60 0000	49.16
* 77	Perylene-d12	264	21 976	21.975	(1.000)	2755440	20 0000	
78	Indeno(1,2,3-cd)pyrene	276	23.567	23 567	(1.072)	11159079	60 0000	51.91
79	Dibenzo(a,h)anthracene	278	23.594	23.599	(1.074)	8610988	60.0000	49.14
80	Benzo(g,h,i)perylene	276	24 011	24 021	(1 093)	9893544	60 0000	52.55
90	N-Nitrosodimethylamine	74	3 540	3.545	(0.434)	2348401	60 0000	58.37
103	Pyridine	79	3.486	3 502	(0 428)	3971882	60.0000	57.87
91	Aniline	93	7.707	7.707	(0.946)	5610498	60 0000	51.71
105	1-methylnaphthalene	141	11.548	11.547	(1.131)	4126190	60 0000	52.51
93	Benzidine	184	17 707	17 707	(0 894)	1879611	60.0000	40.07
111	Azobenzene (1,2-DP-Hydrazine)	77	14.245	14.251	(1 088)	5665256	60.0000	48.59
143	1,4-Dioxane	88	2.792	2.792	(0.343)	1646712	60.0000	57.42
$ 137	d8-1,4-Dioxane	96	2.738	2 738	(0 336)	1651409	60.0000	57.96
144	alpha-Terpineol	59	10.276	10 276	(1.006)	2310822	60.0000	56.39
177	p-Benzoquinone	82	6.831	6 825	(0 669)	798878	60.0000	67.86
98	Retene	219	18 380	18.380	(0.928)	3578902	60.0000	54.21
99	Perylene	252	22 018	21 906	(1.002)	6322869	60.0000	50.99
133	Butylatedhydroxytoluene	205	13 262	13 268	(1.013)	4213512	60 0000	50 54
115	Tributyl Phosphate	99	14.299	14 309	(0 924)	5710957	60.0000	51.32
116	Dibutyl Phenyl Phosphate	175	16.040	16 046	(1.036)	4184592	60.0000	55 88
117	Butyl Diphenyl Phosphate	94	17.718	17 718	(0 894)	1285741	60 0000	54 52
118	Triphenyl Phosphate	326	19 326	19 331	(0.975)	1304244	60 0000	59.24
123	Acetophenone	105	8 861	8.860	(1.087)	4259840	60.0000	52.75
168	Pentachlorobenzene	250	13.455	13 455	(1.028)	2334250	60.0000	53.62
113	Diphenyl Oxide	170	12.344	12.349	(0.943)	3957298	60.0000	54.54
112	Biphenyl	154	12.157	12 156	(0.929)	5254572	60 0000	46.44
120	2,3,4,6-Tetrachlorophenol	232	13 690	13.695	(1.046)	1728561	60 0000	60.01
151	1,2,4,5-Tetrachlorobenzene	216	11 713	11 713	(0.895)	2730402	60.0000	54.37
110	Tetrachloroguaiacol	247	15.431	15 437	(0.997)	1831875	120 000	112.5
109	3,4,5-Trichloroguaiacol	213	13 791	13 791	(0 891)	1007325	60 0000	58.33
181	3,4,6-Trichloroguaiacol	211	13.909	13.914	(1.707)	1173808	60 0000	54.57
108	4,5,6-Trichloroguaiacol	213	14.822	14 828	(1 132)	1004407	60.0000	58.13
184	3,4-Dichloroguaiacol	192	12.237	12 237	(1.501)	1136859	60.0000	57 13
107	4,5-Dichloroguaiacol	192	13.027	13.033	(0.995)	2676535	120.000	114 3
182	4,6-Dichloroguaiacol	192	13 027	13 033	(1 598)	2684340	120.000	112.1
185	4-Chloroguaiacol	115	11.142	11.147	(1 367)	716895	30 0000	28.47
186	Carbaryl	144	16 291	16 297	(1.052)	3653679	60 0000	59.12
178	2-Benzyl-4-Chlorophenol	218	16.249	16.254	(1.050)	1385775	60.0000	59.04
106	Guaiacol	124	9.128	9 128	(1.120)	2631519	60 0000	52.44
189	N-Nitrosomethylethylamine	88	5.329	5.329	(0.654)	893117	60 0000	56.53
188	2,6-Dichlorophenol	162	10.404	10 404	(1.277)	2297547	60 0000	54.57

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 10191207.D
Lab Smp Id: IC601019
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Misc Info: 12-

Calibration Date: 19-OCT-2012
Calibration Time: 16:20
Client Smp ID: IC601019
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	884875	20.24
27 Naphthalene-d8	2597762	1298881	5195524	3156975	21.53
42 Acenaphthene-d10	1503943	751972	3007886	1750239	16.38
59 Phenanthrene-d10	2402003	1201002	4804006	2668096	11.08
69 Chrysene-d12	2331938	1165969	4663876	2550867	9.39
134 Di-n-octylphthala	2790605	1395302	5581210	2892143	3.64
77 Perylene-d12	2485610	1242805	4971220	2755440	10.86

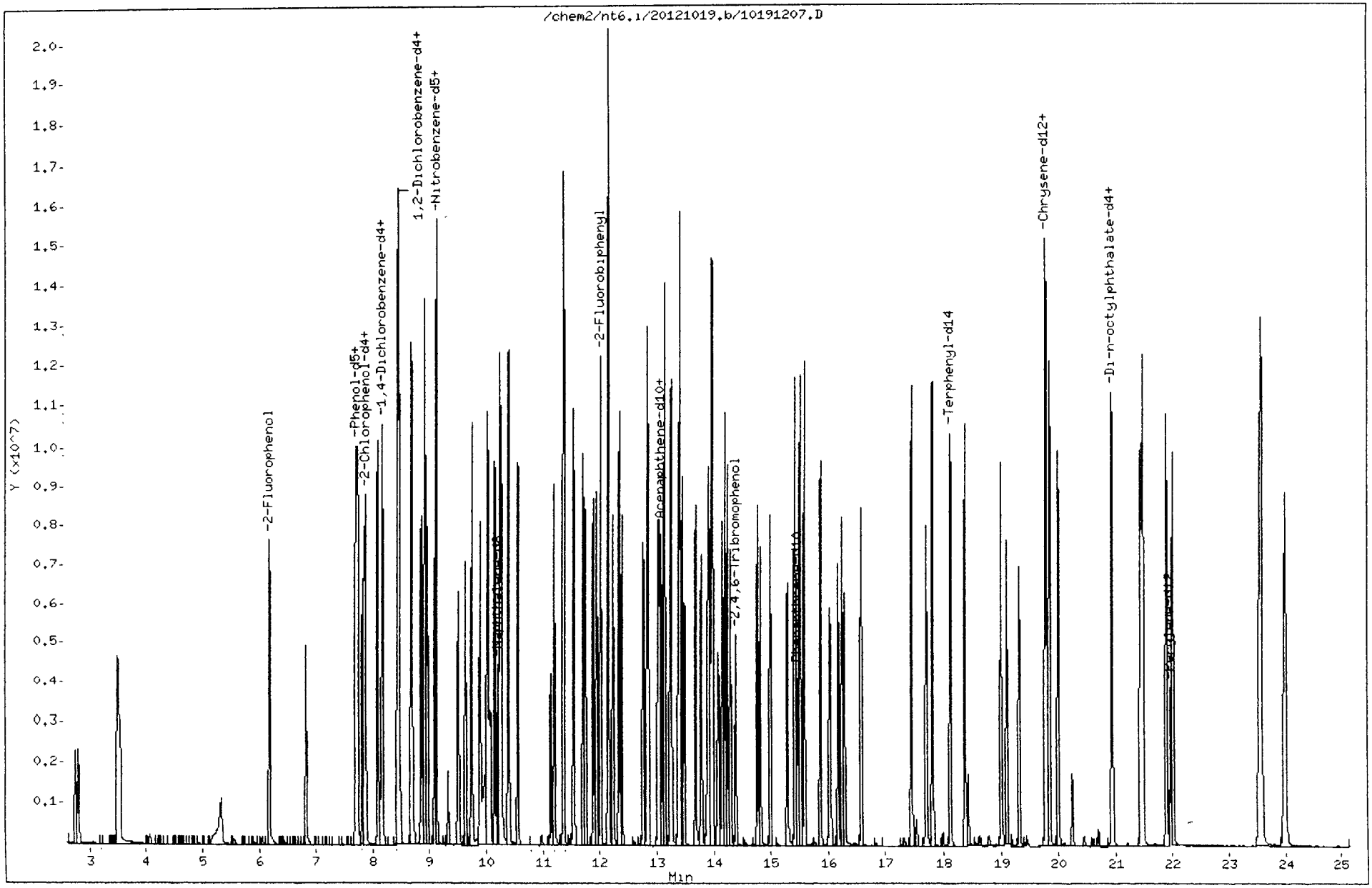
		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.15	7.65	8.65	8.15	0.04
27 Naphthalene-d8	10.21	9.71	10.71	10.21	0.04
42 Acenaphthene-d10	13.09	12.59	13.59	13.09	0.03
59 Phenanthrene-d10	15.48	14.98	15.98	15.48	0.02
69 Chrysene-d12	19.80	19.30	20.30	19.81	0.05
134 Di-n-octylphthala	20.94	20.44	21.44	20.93	-0.01
77 Perylene-d12	21.97	21.47	22.47	21.98	0.02

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

Data File: /chem2/nt6.1/20121019.b/10191207.D
Date : 19-OCT-2012 19:46
Client ID: IC601019
Sample Info: IC601019,

Instrument: nt6.1
Operator: JZ
Column diameter: 0.32

Column phase: ZB-5msi



CO-ELUTION SUMMARY FOR FILE - 10191207.D

Lab ID: IC601019, Method: SW846101912.m, Instrument: nt6.i, Date: 19-OCT-2012

RT	CO-ELUTION COMPOUNDS
19.791	3,3'-Dichlorobenzidine and Benzo(a)anthracene

checked ok

19/22/12

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121019.b/10191208.D
Lab Smp Id: IC801019 Client Smp ID: IC801019
Inj Date : 19-OCT-2012 20:20
Operator : JZ Inst ID: nt6.i
Smp Info : IC801019,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem2/nt6.i/20121019.b/SW846101912.m
Meth Date : 22-Oct-2012 10:59 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 20:20 Cal File: 10191208.D
Als bottle: 8 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALL.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable 10/27/12

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$	1 2-Fluorophenol	112	Compound Not Detected					
$	2 Phenol-d5	99	Compound Not Detected.					
	3 Phenol	94	7 744	7.744	(0.950)	4668967	80.0000	74 89
$	5 2-Chlorophenol-d4	132	Compound Not Detected					
	4 Bis(2-Chloroethyl)ether	93	7 824	7 824	(0.960)	3457672	80 0000	70 06
	6 2-Chlorophenol	128	7.877	7 877	(0.967)	3660751	80 0000	70.90
	7 1,3-Dichlorobenzene	146	8.091	8.091	(0.993)	4007474	80.0000	69 27
*	8 1,4-Dichlorobenzene-d4	152	8 150	8.150	(1.000)	720309	20.0000	
	9 1,4-Dichlorobenzene	146	8.177	8.177	(1.003)	3915222	80.0000	68.62
$	10 1,2-Dichlorobenzene-d4	152	Compound Not Detected					
	12 1,2-Dichlorobenzene	146	8.476	8.476	(1.040)	3724433	80 0000	68.50
	11 Benzyl alcohol	108	8 449	8.449	(1.037)	3144708	80.0000	75.87
	14 2,2'-oxybis(1-Chloropropane)	45	8 700	8.700	(1.067)	4632409	80.0000	66.93
	13 2-Methylphenol	108	8 684	8.684	(1.066)	3248109	80.0000	68.95
	17 Hexachloroethane	117	8 967	8.967	(1.100)	1635043	80.0000	71.80
	16 N-Nitroso-di-n-propylamine	70	8 930	8.930	(1.096)	2507913	80.0000	71 81

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	15 4-Methylphenol	108	8 919	8.919	(1 094)	3386603	80.0000	69 73
$	18 Nitrobenzene-d5	82	Compound Not Detected.					
	19 Nitrobenzene	77	9.122	9 122	(0.893)	3626617	80.0000	67 83
	20 Isophorone	82	9.517	9 517	(0 932)	5895393	80.0000	71 31
	21 2-Nitrophenol	139	9.640	9.640	(0.944)	2073258	80.0000	77.96
	22 2,4-Dimethylphenol	107	9.758	9 758	(0.956)	3407531	80 0000	70 74
	23 Bis(2-Chloroethoxy)methane	93	9 902	9 902	(0 970)	4083374	80.0000	69.15
	24 Benzoic acid	105	10.100	10.100	(0.989)	6150939	160.000	185.2 (M)
	25 2,4-Dichlorophenol	162	10 030	10.030	(0 982)	2901716	80.0000	72.32
	26 1,2,4-Trichlorobenzene	180	10.159	10.159	(0.995)	3230875	80.0000	70.54
*	27 Naphthalene-d8	136	10 212	10.212	(1.000)	2592116	20.0000	
	28 Naphthalene	128	10.249	10 249	(1 004)	8372930	80.0000	54 78
	29 4-Chloroaniline	127	10 394	10.394	(1 018)	3066871	80.0000	78.32
	30 Hexachlorobutadiene	225	10 565	10.565	(1.035)	2023452	80 0000	72.91
	31 4-Chloro-3-methylphenol	107	11.206	11.206	(1.097)	2945383	80.0000	75.48
	32 2-Methylnaphthalene	141	11 377	11.377	(1 114)	5506582	80.0000	63 08
	33 Hexachlorocyclopentadiene	237	11.756	11.756	(0.898)	2237468	80 0000	82.26
	34 2,4,6-Trichlorophenol	196	11.889	11 889	(0 908)	2182893	80.0000	78.36
	35 2,4,5-Trichlorophenol	196	11.948	11.948	(0 913)	2308588	80.0000	78 95
$	36 2-Fluorobiphenyl	172	Compound Not Detected.					
	37 2-Chloronaphthalene	162	12 162	12 162	(0 929)	5181477	80.0000	63 95
	38 2-Nitroaniline	65	12.397	12.397	(0 947)	2370360	80.0000	77 29
	39 Dimethylphthalate	163	12.776	12 776	(0.976)	6378366	80 0000	72.10
	40 Acenaphthylene	152	12 840	12 840	(0 981)	8560902	80 0000	60 29
	41 2,6-Dinitrotoluene	165	12 867	12.867	(0.983)	1631315	80.0000	79.07
*	42 Acenaphthene-d10	164	13.091	13.091	(1 000)	1451817	20 0000	
	43 3-Nitroaniline	138	13.081	13 081	(0.999)	1129974	80.0000	42 63
	44 Acenaphthene	153	13 150	13.150	(1.004)	5995122	80.0000	65.27
	45 2,4-Dinitrophenol	184	13.252	13 252	(1.012)	2061033	160 000	159.4
	46 Dibenzofuran	168	13.417	13.417	(1 025)	8447613	80.0000	62.21
	47 4-Nitrophenol	109	13.391	13 391	(1.023)	849860	80.0000	78.48
	48 2,4-Dinitrotoluene	165	13.503	13.503	(1 031)	2158949	80 0000	81.32
	50 Diethylphthalate	149	13 930	13 930	(1 064)	6167299	80 0000	67.48
	49 Fluorene	166	13.973	13 973	(1.067)	6419040	80.0000	64.37
	51 4-Chlorophenyl-phenylether	204	13.989	13.989	(1.069)	3272790	80.0000	69 60
	52 4-Nitroaniline	138	14.096	14.096	(1 077)	1914167	80 0000	77.89
	53 4,6-Dinitro-2-methylphenol	198	14.165	14.165	(0.915)	2705124	160 000	175 4
	54 N-Nitrosodiphenylamine	169	14.203	14.203	(0.918)	4787890	80.0000	66.74
$	55 2,4,6-Tribromophenol	330	Compound Not Detected.					
	56 4-Bromophenyl-phenylether	248	14.774	14.774	(0 954)	2074905	80 0000	71 89
	57 Hexachlorobenzene	284	14 999	14.999	(0 969)	2094541	80 0000	70 25
	58 Pentachlorophenol	266	15.298	15.298	(0.988)	1492673	80.0000	87 67
*	59 Phenanthrene-d10	188	15.479	15.479	(1 000)	2366869	20.0000	
	60 Phenanthrene	178	15.522	15 522	(1.003)	8438338	80 0000	60 37
	61 Anthracene	178	15.597	15 597	(1 008)	8494231	80 0000	59 21
	62 Carbazole	167	15 875	15 875	(1 026)	7350086	80 0000	63 76
	63 Di-n-butylphthalate	149	16.585	16.585	(1 071)	8605829	80 0000	60 21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
64	Fluoranthene	202	17.467	17 467	(1.128)	9083585	80.0000	61.99
65	Pyrene	202	17 825	17.825	(0 899)	9274851	80 0000	56.31
$ 66	Terphenyl-d14	244	Compound Not Detected					
67	Butylbenzylphthalate	149	19 016	19.016	(0.960)	4523051	80 0000	69.64
68	Benzo(a)anthracene	228	19.796	19.796	(0 999)	8881046	80 0000	63.66
* 69	Chrysene-d12	240	19 817	19.817	(1 000)	2347949	20 0000	
70	3,3'-Dichlorobenzidine	252	19 790	19.790	(0.999)	2125204	80.0000	54 12
71	Chrysene	228	19 860	19 860	(1.002)	8348489	80 0000	61.45
72	bis(2-Ethylhexyl)phthalate	149	20 004	20.004	(0 955)	5853253	80.0000	70.62
* 134	Di-n-octylphthalate-d4	153	20 939	20 939	(1.000)	2627804	20.0000	
73	Di-n-octylphthalate	149	20 950	20.950	(1 000)	8904605	80 0000	64.60
74	Benzo(b)fluoranthene	252	21.457	21.457	(0 976)	9974319	80.0000	67.95
75	Benzo(k)fluoranthene	252	21 495	21.495	(0 978)	8541793	80.0000	56.96(H)
187	Total Benzofluoranthenes	252	21.495	21 495	(0.978)	17509413	160 000	123.0
76	Benzo(a)pyrene	252	21.906	21.906	(0 997)	8867069	80 0000	64.73
* 77	Perylene-d12	264	21.975	21.975	(1 000)	2479241	20.0000	
78	Indeno(1,2,3-cd)pyrene	276	23 567	23.567	(1.072)	12939646	80.0000	68.50
79	Dibenzo(a,h)anthracene	278	23.599	23.599	(1.074)	9931227	80 0000	64.96
80	Benzo(g,h,i)perylene	276	24 021	24.021	(1 093)	11367195	80.0000	68.69
90	N-Nitrosodimethylamine	74	3 545	3.545	(0.435)	2483645	80.0000	76.40
103	Pyridine	79	3.502	3.502	(0.430)	4270979	80.0000	76.93
91	Aniline	93	7 707	7.707	(0.946)	5716066	80.0000	66.54
105	1-methylnaphthalene	141	11 547	11.547	(1.131)	4398434	80.0000	69 65
93	Benzidine	184	17.707	17 707	(0.894)	2118598	80 0000	81 11
111	Azobenzene (1,2-DP-Hydrazine)	77	14.251	14.251	(1.089)	6303140	80.0000	66 95
143	1,4-Dioxane	88	2.792	2.792	(0.343)	1821195	80 0000	78.26
$ 137	d8-1,4-Dioxane	96	2 738	2.738	(0.336)	1836792	80.0000	79 30
144	alpha-Terpineol	59	10 276	10.276	(1.006)	2470428	80.0000	74 30
177	p-Benzoquinone	82	6 825	6.825	(0.668)	814302	80.0000	83 61
98	Retene	219	18 380	18 380	(0.927)	4248978	80.0000	71 20
99	Perylene	252	Compound Not Detected					
133	Butylatedhydroxytoluene	205	13.268	13.268	(1.013)	4548093	80.0000	67 49
115	Tributyl Phosphate	99	14.309	14.309	(0.924)	6643177	80.0000	68.85
116	Dibutyl Phenyl Phosphate	175	16 046	16.046	(1.037)	5127144	80 0000	77 57
117	Butyl Diphenyl Phosphate	94	17.718	17.718	(0 894)	1571009	80.0000	73.38
118	Triphenyl Phosphate	326	19 331	19.331	(0 975)	1623090	80 0000	80.08
123	Acetophenone	105	8 860	8.860	(1.087)	4562633	80.0000	70.74
168	Pentachlorobenzene	250	13 455	13.455	(1.028)	2567037	80.0000	72.23
113	Diphenyl Oxide	170	12 349	12.349	(0 943)	4323854	80.0000	72.90
112	Biphenyl	154	12.156	12.156	(0.929)	5692410	80.0000	62.82
120	2,3,4,6-Tetrachlorophenol	232	13 695	13 695	(1 046)	1995550	80.0000	82 99
151	1,2,4,5-Tetrachlorobenzene	216	11.713	11.713	(0.895)	2976169	80.0000	72.56
110	Tetrachloroguaiacol	247	15.437	15.437	(0 997)	2161059	160.000	151.0
109	3,4,5-Trichloroguaiacol	213	13 791	13 791	(0.891)	1121425	80 0000	74 10
181	3,4,6-Trichloroguaiacol	211	13 914	13 914	(1 707)	1355720	80 0000	77.78
108	4,5,6-Trichloroguaiacol	213	14.828	14.828	(1.133)	1173682	80.0000	81 62
184	3,4-Dichloroguaiacol	192	12 237	12.237	(1 501)	1271817	80 0000	78 72

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
107 4,5-Dichloroguaiacol	192	13 033	13.033	(0.996)	3033633	160 000	156.8
182 4,6-Dichloroguaiacol	192	13 033	13.033	(1.599)	3033633	160.000	156.2
185 4-Chloroguaiacol	115	11.147	11.147	(1 368)	789406	40.0000	38.72
186 Carbaryl	144	16 297	16.297	(1 053)	4513666	80.0000	81.99
178 2-Benzyl-4-Chlorophenol	218	16 254	16.254	(1.050)	1674797	80.0000	80.38
106 Guaiacol	124	9 128	9.128	(1 120)	2852146	80.0000	71.12
189 N-Nitrosomethylethylamine	88	5.329	5 329	(0 654)	955975	80 0000	75.09
188 2,6-Dichlorophenol	162	10 404	10.404	(1 277)	2436709	80 0000	72.24

QC Flag Legend

M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 10191208.D
Lab Smp Id: IC801019
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Misc Info: 12-

Calibration Date: 19-OCT-2012
Calibration Time: 16:20
Client Smp ID: IC801019
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

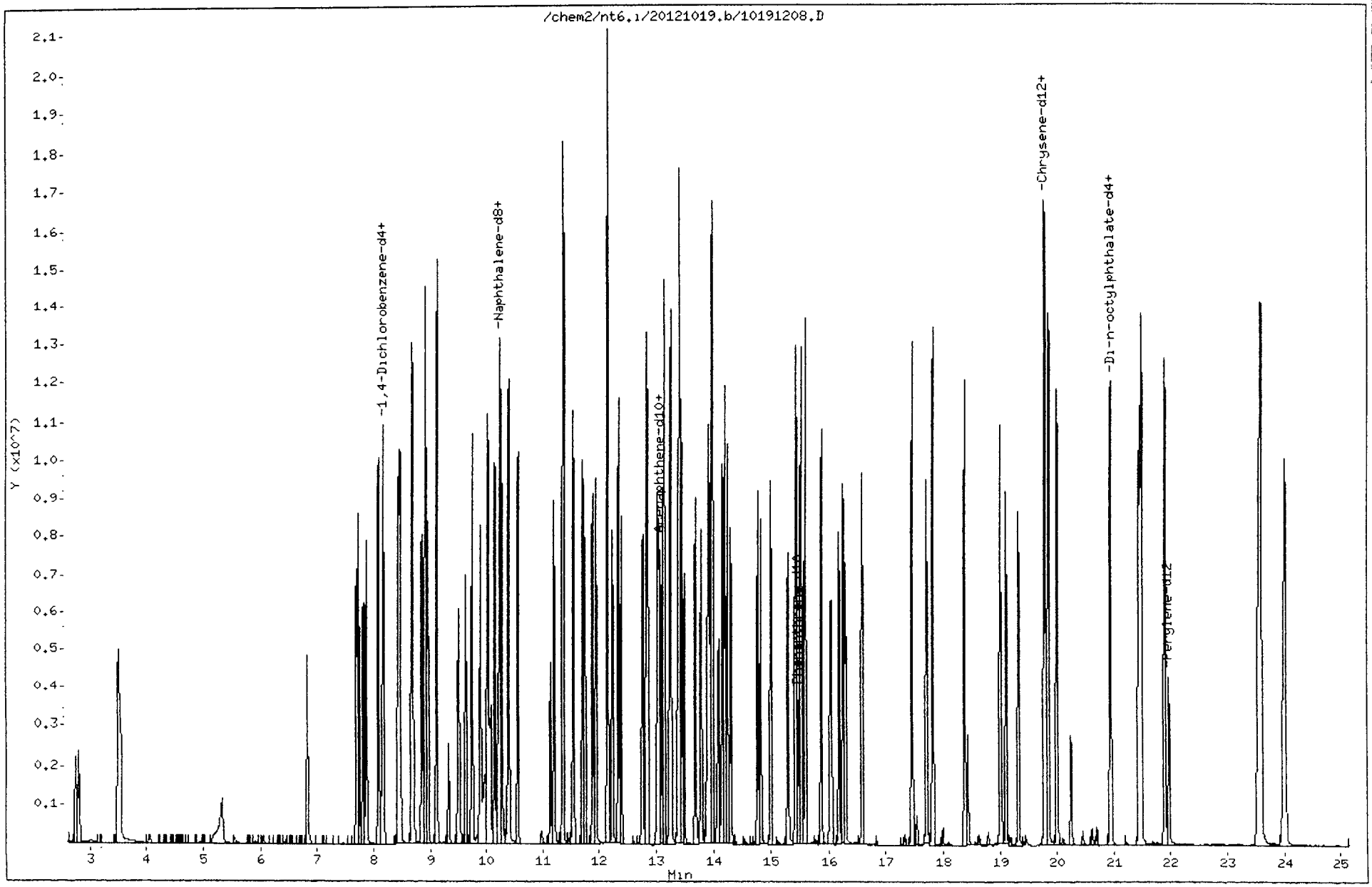
		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	720309	-2.12
27 Naphthalene-d8	2597762	1298881	5195524	2592116	-0.22
42 Acenaphthene-d10	1503943	751972	3007886	1451817	-3.47
59 Phenanthrene-d10	2402003	1201002	4804006	2366869	-1.46
69 Chrysene-d12	2331938	1165969	4663876	2347949	0.69
134 Di-n-octylphthala	2790605	1395302	5581210	2627804	-5.83
77 Perylene-d12	2485610	1242805	4971220	2479241	-0.26

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.15	7.65	8.65	8.15	0.04
27 Naphthalene-d8	10.21	9.71	10.71	10.21	0.03
42 Acenaphthene-d10	13.09	12.59	13.59	13.09	0.03
59 Phenanthrene-d10	15.48	14.98	15.98	15.48	0.02
69 Chrysene-d12	19.80	19.30	20.30	19.82	0.07
134 Di-n-octylphthala	20.94	20.44	21.44	20.94	0.02
77 Perylene-d12	21.97	21.47	22.47	21.98	0.02

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

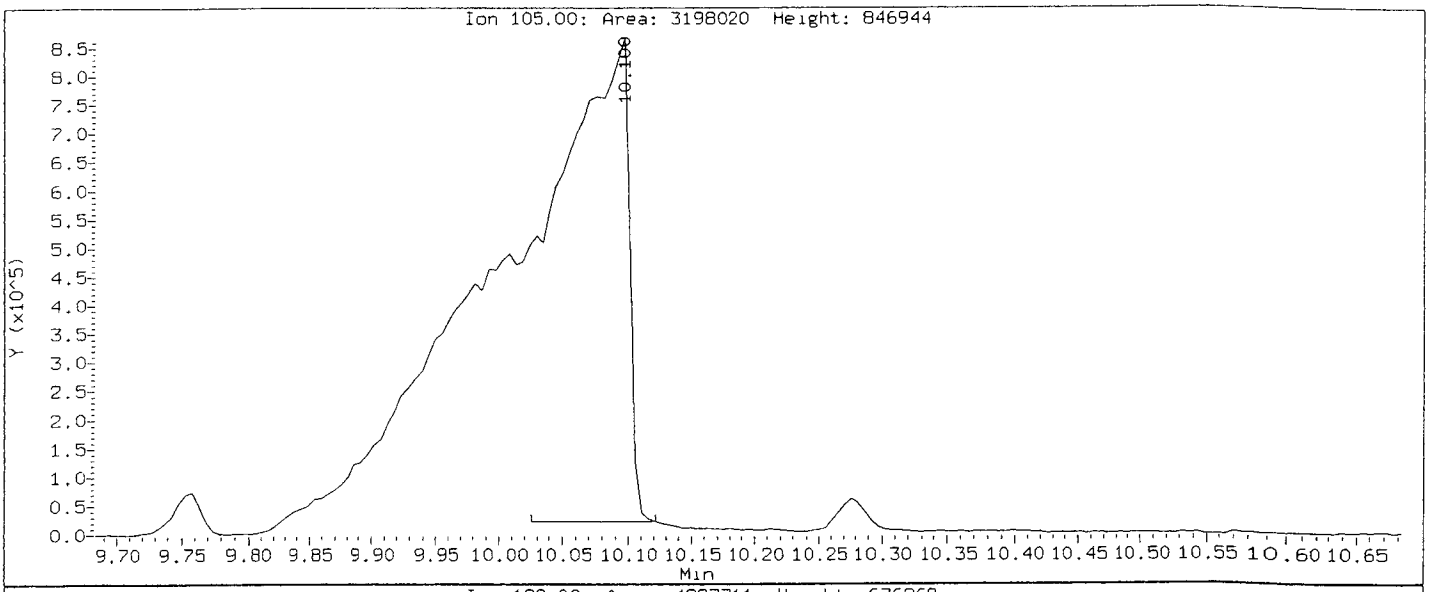
Data File: /chem2/nt6.1/20121019.b/10191208.D
Date : 19-OCT-2012 20:20
Client ID: IC801019
Sample Info: IC801019,
Volume Injected (uL): 1.0
Column phase: ZB-5ms1

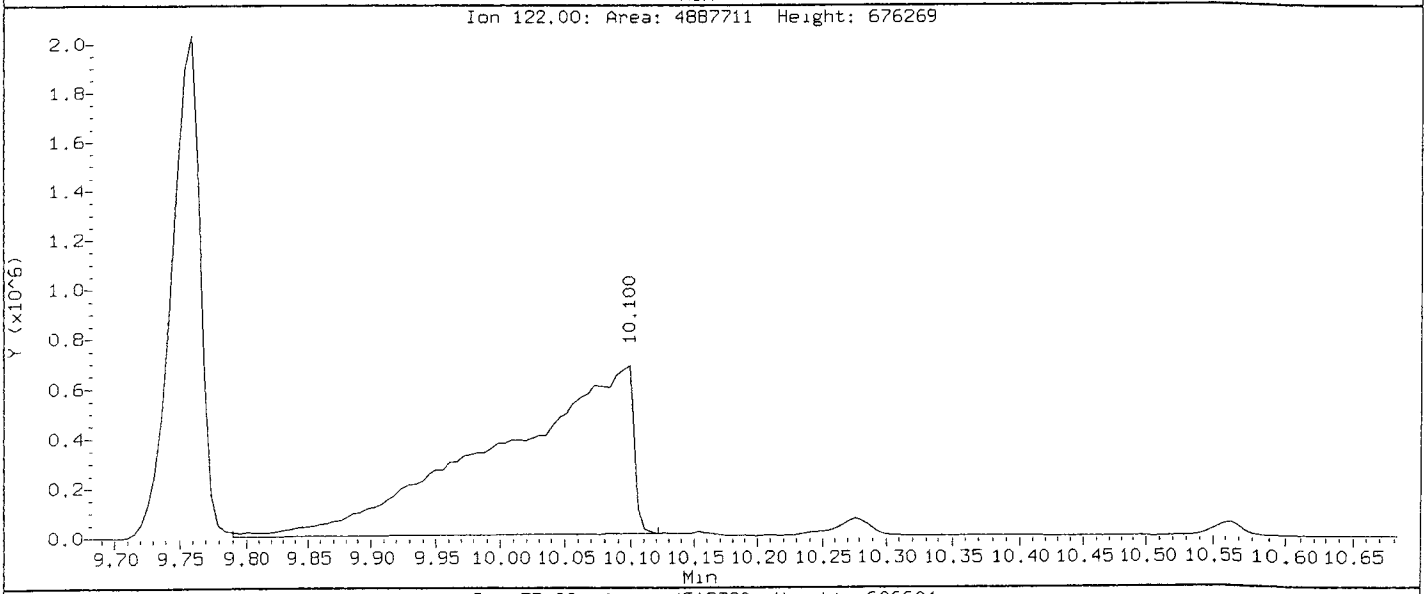
Instrument: nt6.1
Operator: JZ
Column diameter: 0.32

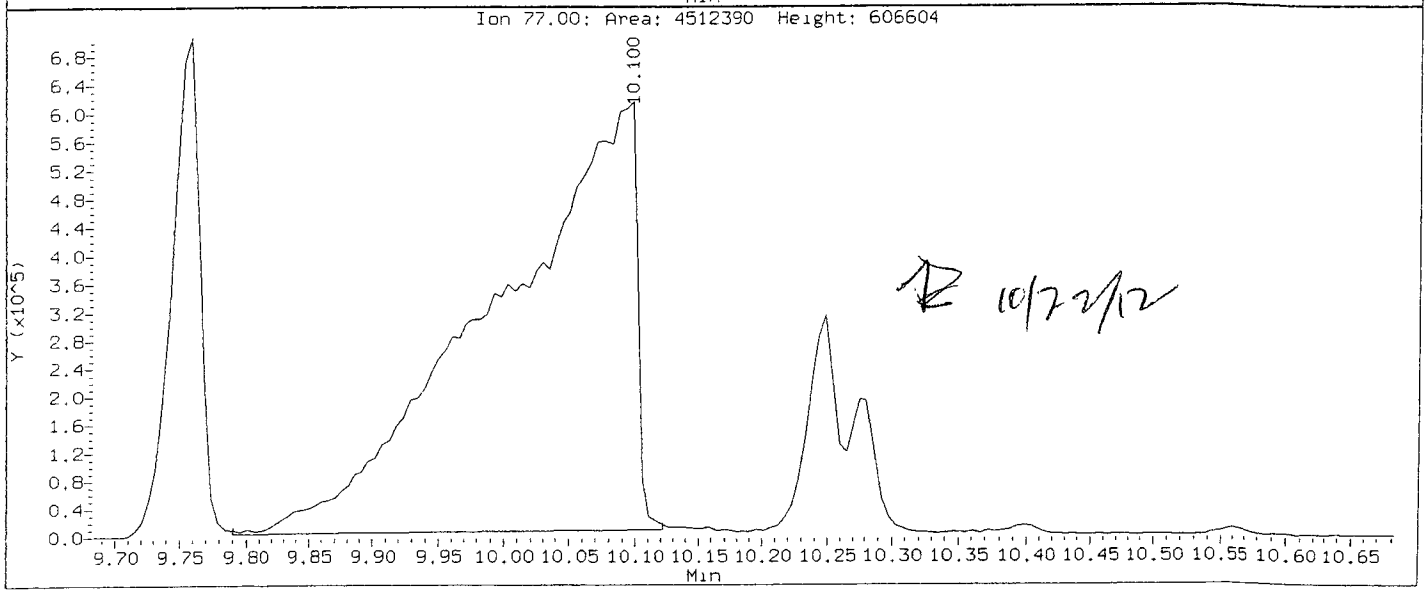


Data File: /chem2/nt6.i/20121019.b/10191208.D
Injection Date: 19-OCT-2012 20:20
Instrument: nt6.i
Client Sample ID:

Compound: Benzoic acid
CAS Number: 65-85-0



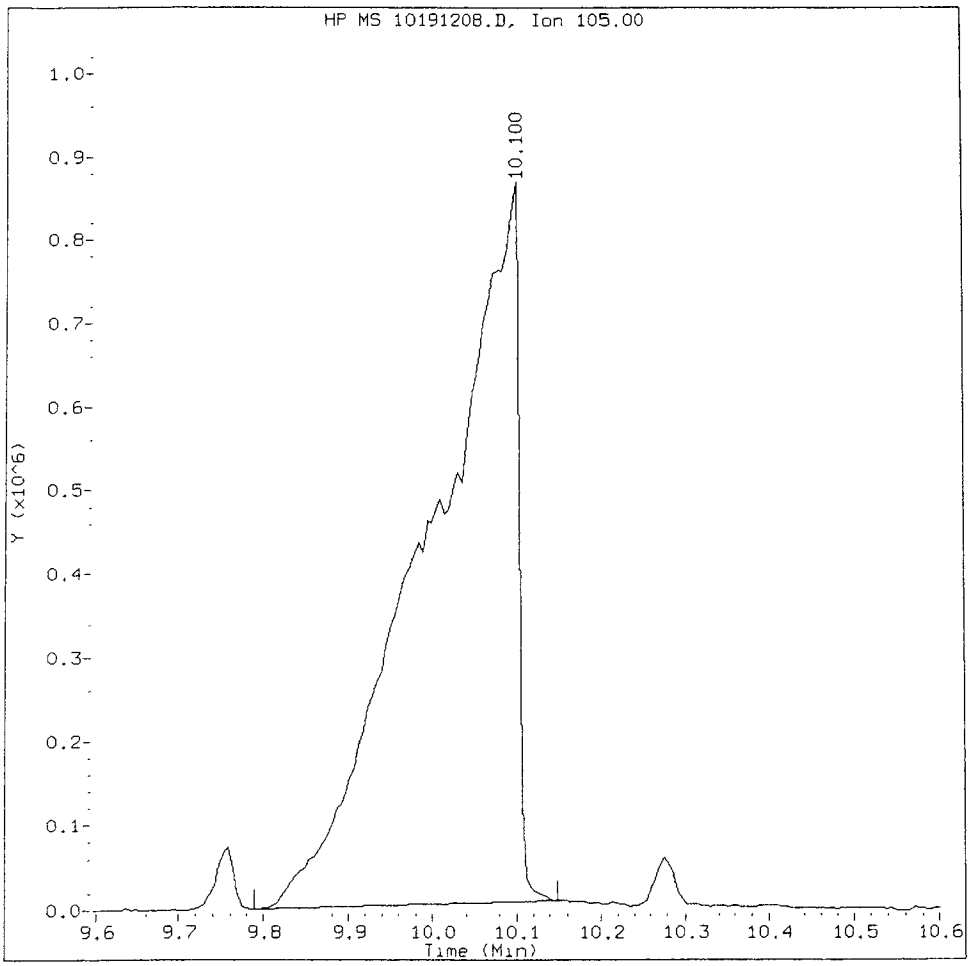




10/22/12

IC801019, /chem2/nt6.i/20121019.b/10191208.D

Benzoic acid Amount: 185.16 Area: 6150939



MANUAL INTEGRATION for Benzoic acid

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 10/22/12

CO-ELUTION SUMMARY FOR FILE - 10191208.D

Lab ID: IC801019, Method: SW846101912.m, Instrument: nt6.i, Date: 19-OCT-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121019.b/10191209.D
Lab Smp Id: ICV1019 Client Smp ID: ICV1019
Inj Date : 19-OCT-2012 20:54
Operator : JZ Inst ID: nt6.i
Smp Info : ICV1019,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem2/nt6.i/20121019.b/SW846101912.m
Meth Date : 22-Oct-2012 11:02 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 20:20 Cal File: 10191208.D
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALS.sub
Target Version: 3.50

10/22/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$	1 2-Fluorophenol	112	6.170	6.170	(0 757)	1130321	25.0312	25.03
$	2 Phenol-d5	99	7 713	7 714	(0 947)	1427895	25 4745	25.47
	3 Phenol	94	7.730	7 744	(0.949)	1360289	23 1669	23 17
$	5 2-Chlorophenol-d4	132	7.847	7 847	(0 963)	1210345	26.1016	26 10
	4 Bis(2-Chloroethyl)ether	93	7.815	7 824	(0 959)	1173840	25 2565	25 26
	6 2-Chlorophenol	128	7 868	7.877	(0.966)	1135283	23 3464	23 35
	7 1,3-Dichlorobenzene	146	8.082	8 091	(0 992)	1399607	25.6879	25.69
*	8 1,4-Dichlorobenzene-d4	152	8 146	8 150	(1 000)	678360	20.0000	
	9 1,4-Dichlorobenzene	146	8.173	8 177	(1.003)	1387359	25.8174	25.82
$	10 1,2-Dichlorobenzene-d4	152	8 451	8 451	(1.037)	857011	25 7646	25.76
	12 1,2-Dichlorobenzene	146	8 472	8.476	(1 040)	1316490	25.7087	25 71
	11 Benzyl alcohol	108	8.429	8 449	(1.035)	1004675	25 7388	25 74
	14 2,2'-oxybis(1-Chloropropane)	45	8.691	8 700	(1.067)	1657924	25.4371	25.44
	13 2-Methylphenol	108	8 670	8 684	(1.064)	1049549	23 6560	23.66
	17 Hexachloroethane	117	8 964	8 967	(1.100)	546278	25.4714	25 47
	16 N-Nitroso-di-n-propylamine	70	8 910	8.930	(1.094)	822157	24 9958	25 00

Data File: /chem2/nt6.i/20121019.b/10191209.D
Report Date: 22-Oct-2012 11:05

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	15 4-Methylphenol	108	8.899	8 919	(1 092)	1087407	23 7754	23 78
$	18 Nitrobenzene-d5	82	9.081	9 087	(0.890)	1332334	26.1150	26.12
	19 Nitrobenzene	77	9.113	9.122	(0 893)	1262381	25.3319	25.33
	20 Isophorone	82	9.498	9.517	(0.930)	1929458	25.0408	25.04
	21 2-Nitrophenol	139	9.631	9.640	(0 943)	605063	24.4136	24 41
	22 2,4-Dimethylphenol	107	9 744	9.758	(0 954)	1061239	23.6376	23.64
	23 Bis(2-Chloroethoxy)methane	93	9 888	9 902	(0 969)	1386630	25.1947	25.19
	24 Benzoic acid	105	9.973	10.100	(0.977)	1640012	52 9708	52.97
	25 2,4-Dichlorophenol	162	10.021	10 030	(0 982)	921177	24.6354	24.64
	26 1,2,4-Trichlorobenzene	180	10.150	10 159	(0.994)	1105569	25 9009	25 90
*	27 Naphthalene-d8	136	10.208	10.212	(1.000)	2415842	20.0000	
	28 Naphthalene	128	10 240	10.249	(1.003)	3564547	25.0244	25 02
	29 4-Chloroaniline	127	10.379	10.394	(1.017)	1614812	28.3644	28 36
	30 Hexachlorobutadiene	225	10 561	10.565	(1.035)	669834	25.8979	25 90
	31 4-Chloro-3-methylphenol	107	11.197	11.206	(1.097)	897893	24 6899	24.69
	32 2-Methylnaphthalene	141	11 368	11.377	(1.114)	2195943	26.9921	26.99
	33 Hexachlorocyclopentadiene	237	11.747	11.756	(0 898)	682361	26.6849	26 68
	34 2,4,6-Trichlorophenol	196	11.880	11.889	(0 908)	659626	25.1864	25.19
	35 2,4,5-Trichlorophenol	196	11.939	11 948	(0 912)	708473	25.7709	25 77
$	36 2-Fluorobiphenyl	172	12.014	12 014	(0.918)	2378377	26.2519	26.25
	37 2-Chloronaphthalene	162	12 153	12.162	(0 929)	1974247	25.9178	25 92
	38 2-Nitroaniline	65	12.383	12.397	(0.946)	790479	27.4137	27 41
	39 Dimethylphthalate	163	12 756	12 776	(0 975)	2194386	26.3829	26 38
	40 Acenaphthylene	152	12 831	12.840	(0 980)	3535369	26.4819	26 48
	41 2,6-Dinitrotoluene	165	12.853	12 867	(0.982)	523225	26 9735	26 97
*	42 Acenaphthene-d10	164	13.088	13 091	(1 000)	1364949	20.0000	
	43 3-Nitroaniline	138	13.066	13.081	(0 998)	651564	26.1460	26 15
	44 Acenaphthene	153	13 136	13.150	(1.004)	2213387	25.6321	25.63
	45 2,4-Dinitrophenol	184	13.232	13.252	(1 011)	509639	51.8884	51 89
	46 Dibenzofuran	168	13 403	13 417	(1 024)	3478403	27 2439	27.24
	47 4-Nitrophenol	109	13.365	13.391	(1.021)	267899	26.3150	26.32
	48 2,4-Dinitrotoluene	165	13.483	13.503	(1 030)	681108	27.2875	27 29
	50 Diethylphthalate	149	13.921	13.930	(1 064)	2241409	26 0863	26 09
	49 Fluorene	166	13.964	13.973	(1.067)	2470054	26.3465	26 35
	51 4-Chlorophenyl-phenylether	204	13 985	13.989	(1.069)	1159596	26.2297	26 23
	52 4-Nitroaniline	138	14.065	14 096	(1 075)	633956	27.4366	27.44
	53 4,6-Dinitro-2-methylphenol	198	14.140	14 165	(0 914)	739517	53.4726	53 47
	54 N-Nitrosodiphenylamine	169	14 188	14.203	(0 917)	1699996	26.4219	26 42
$	55 2,4,6-Tribromophenol	330	14 386	14 386	(1.099)	325223	27.9376	27.94
	56 4-Bromophenyl-phenylether	248	14.770	14.774	(0.954)	679634	26.2567	26 26
	57 Hexachlorobenzene	284	14.995	14 999	(0.969)	689197	25.7750	25.78
	58 Pentachlorophenol	266	15.289	15.298	(0 988)	395974	25 9323	25 93
*	59 Phenanthrene-d10	188	15.476	15.479	(1 000)	2122745	20 0000	
	60 Phenanthrene	178	15 513	15.522	(1.002)	3321305	26.4950	26 50
	61 Anthracene	178	15.582	15 597	(1.007)	3432814	26.6805	26 68
	62 Carbazole	167	15 866	15.875	(1.025)	2698600	26.1020	26.10
	63 Di-n-butylphthalate	149	16 581	16 585	(1 071)	3451837	26.9287	26 93

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	64 Fluoranthene	202	17 458	17.467	(1.128)	3598183	27.3807	27.38
	65 Pyrene	202	17.815	17 825	(0 900)	3763710	25.1568	25 16
$	66 Terphenyl-d14	244	18.125	18 126	(0 915)	2028318	25.8413	25 84
	67 Butylbenzylphthalate	149	19 001	19 016	(0 960)	1544660	26.1854	26 19
	68 Benzo(a)anthracene	228	19 776	19 796	(0.999)	3331287	26 2905	26.29
*	69 Chrysene-d12	240	19 803	19.817	(1.000)	2132526	20.0000	
	70 3,3'-Dichlorobenzidine	252	19 781	19 790	(0 999)	964985	27.0569	27.06
	71 Chrysene	228	19 845	19 860	(1.002)	3274049	26 5325	26.53
	72 bis(2-Ethylhexyl)phthalate	149	20 000	20 004	(0 955)	2040939	25.9164	25 92
*	134 Di-n-octylphthalate-d4	153	20.935	20.939	(1.000)	2496927	20 0000	
	73 Di-n-octylphthalate	149	20 946	20 950	(1 000)	3462316	26.4351	26 44
	74 Benzo(b)fluoranthene	252	21.437	21 457	(0 976)	3525669	26.2224	26 22
	75 Benzo(k)fluoranthene	252	21.475	21.495	(0.978)	3817960	27.7952	27.80
	187 Total Benzofluoranthenes	252	21.475	21.495	(0.978)	6951557	53.2975	53 30
	76 Benzo(a)pyrene	252	21.886	21.906	(0 996)	3353657	26.7262	26.73
*	77 Perylene-d12	264	21 966	21.975	(1 000)	2270897	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	23.542	23.567	(1.072)	4497335	25.9938	25.99
	79 Dibenzo(a,h)anthracene	278	23 564	23 599	(1 073)	3706405	26.4664	26.47
	80 Benzo(g,h,i)perylene	276	23 980	24.021	(1.092)	3865690	25.5015	25.50
	90 N-Nitrosodimethylamine	74	3 477	3.545	(0.427)	751692	24.5526	24 55
	103 Pyridine	79	3.445	3.502	(0.423)	1319026	25.2281	25.23
	91 Aniline	93	7.697	7 707	(0 945)	2038629	25.1984	25 20
	105 1-methylnaphthalene	141	11.538	11 547	(1.130)	1551625	26.3625	26.36
	93 Benzidine	184	17.698	17.707	(0 894)	901475	24.2512	24.25
	111 Azobenzene (1,2-DP-Hydrazine)	77	14 236	14.251	(1.088)	2280315	25 7629	25 76
	143 1,4-Dioxane	88	2.756	2.792	(0.338)	539608	24.6206	24 62
$	137 d8-1,4-Dioxane	96	2 703	2 738	(0 332)	539701	24.7429	24.74
	144 alpha-Terpineol	59	10.267	10.276	(1 006)	821206	26.4997	26.50
	177 p-Benzoquinone	82	6.816	6.825	(0 668)	268548	29.5849	29 58
	98 Retene	219	18.376	18 380	(0.928)	1489756	27.4849	27.48
	99 Perylene	252	22.004	22.004	(1 002)	2751803	26.9264	26 93
	133 Butylatedhydroxytoluene	205	13.259	13 268	(1 013)	1752393	27.6577	27.66
	115 Tributyl Phosphate	99	14.284	14.309	(0 923)	2412878	27 8840	27 88
	116 Dibutyl Phenyl Phosphate	175	16.026	16.046	(1 036)	1660413	28.0083	28.01
	117 Butyl Diphenyl Phosphate	94	17 714	17 718	(0.895)	516328	26.5528	26.55
	118 Triphenyl Phosphate	326	19.322	19 331	(0 976)	510401	27.7266	27 73
	123 Acetophenone	105	8.846	8.860	(1.086)	1530904	25.2044	25 20
	168 Pentachlorobenzene	250	13.440	13.455	(1 027)	869094	26 0114	26 01
	113 Diphenyl Oxide	170	12.340	12 349	(0 943)	1528822	27.4162	27 42
	112 Biphenyl	154	12 147	12.156	(0.928)	2286121	26.8348	26.83
	120 2,3,4,6-Tetrachlorophenol	232	13 686	13.695	(1 046)	583693	25.8206	25.82
	151 1,2,4,5-Tetrachlorobenzene	216	11 704	11.713	(0.894)	1000785	25.9517	25 95
	110 Tetrachloroguaiacol	247	15 417	15.437	(0.996)	719622	56.0607	56.06
	109 3,4,5-Trichloroguaiacol	213	13.782	13 791	(0.891)	373343	27 5082	27.51
	181 3,4,6-Trichloroguaiacol	211	13.900	13 914	(1 706)	450256	27.4303	27 43
	108 4,5,6-Trichloroguaiacol	213	14 819	14 828	(1 132)	378771	28.0153	28.02
	184 3,4-Dichloroguaiacol	192	12 233	12 237	(1 502)	406326	26.7046	26 70

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
107 4,5-Dichloroguaiacol	192	13.018	13.033	(0 995)	993451	54.6040	54.60
182 4,6-Dichloroguaiacol	192	13.018	13 033	(1 598)	993451	54 3160	54.32
185 4-Chloroguaiacol	115	11 138	11 147	(1.367)	245507	12.7863	12.79
186 Carbaryl	144	16.277	16.297	(1 052)	1303615	26 4030	26.40
178 2-Benzyl-4-Chlorophenol	218	16 234	16 254	(1.049)	536585	28.7130	28.71
106 Guaiacol	124	9.113	9 128	(1 119)	1019914	27 0035	27.00
189 N-Nitrosomethylethylamine	88	5.315	5.329	(0 652)	242106	20.1926	20.19
188 2,6-Dichlorophenol	162	10 395	10.404	(1 276)	788385	24 8188	24.82

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 10191209.D
Lab Smp Id: ICV1019
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Misc Info: 12-

Calibration Date: 19-OCT-2012
Calibration Time: 16:20
Client Smp ID: ICV1019
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	678360	-7.82
27 Naphthalene-d8	2597762	1298881	5195524	2415842	-7.00
42 Acenaphthene-d10	1503943	751972	3007886	1364949	-9.24
59 Phenanthrene-d10	2402003	1201002	4804006	2122745	-11.63
69 Chrysene-d12	2331938	1165969	4663876	2132526	-8.55
134 Di-n-octylphthala	2790605	1395302	5581210	2496927	-10.52
77 Perylene-d12	2485610	1242805	4971220	2270897	-8.64

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	8.15	7.65	8.65	8.15	0.00
27 Naphthalene-d8	10.21	9.71	10.71	10.21	0.00
42 Acenaphthene-d10	13.09	12.59	13.59	13.09	0.00
59 Phenanthrene-d10	15.48	14.98	15.98	15.48	0.00
69 Chrysene-d12	19.80	19.30	20.30	19.80	0.00
134 Di-n-octylphthala	20.94	20.44	21.44	20.94	0.00
77 Perylene-d12	21.97	21.47	22.47	21.97	-0.03

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Client SDG: 20121019
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: ICV1019 Client Smp ID: ICV1019
Level: LOW Operator: JZ
Data Type: MS DATA SampleType: LCS
SpikeList File: ICVS.spk Quant Type: ISTD
Sublist File: ICALS.sub
Method File: /chem2/nt6.i/20121019.b/SW846101912.m
Misc Info: 12-

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
3	Phenol	25.00	23.17	92.67	70-130
4	Bis(2-Chloroethyl)	25.00	25.26	101.03	70-130
6	2-Chlorophenol	25.00	23.35	93.39	70-130
7	1,3-Dichlorobenzen	25.00	25.69	102.75	70-130
9	1,4-Dichlorobenzen	25.00	25.82	103.27	70-130
11	Benzyl alcohol	25.00	25.74	102.96	70-130
12	1,2-Dichlorobenzen	25.00	25.71	102.83	70-130
13	2-Methylphenol	25.00	23.66	94.62	70-130
14	2,2'-oxybis(1-Chlo	25.00	25.44	101.75	70-130
15	4-Methylphenol	25.00	23.78	95.10	70-130
16	N-Nitroso-di-n-pro	25.00	25.00	99.98	70-130
17	Hexachloroethane	25.00	25.47	101.89	70-130
19	Nitrobenzene	25.00	25.33	101.33	70-130
20	Isophorone	25.00	25.04	100.16	70-130
21	2-Nitrophenol	25.00	24.41	97.65	70-130
22	2,4-Dimethylphenol	25.00	23.64	94.55	70-130
23	Bis(2-Chloroethoxy	25.00	25.19	100.78	70-130
24	Benzoic acid	50.00	52.97	105.94	70-130
25	2,4-Dichlorophenol	25.00	24.64	98.54	70-130
26	1,2,4-Trichloroben	25.00	25.90	103.60	70-130
28	Naphthalene	25.00	25.02	100.10	70-130
29	4-Chloroaniline	25.00	28.36	113.46	70-130
30	Hexachlorobutadien	25.00	25.90	103.59	70-130
31	4-Chloro-3-methylp	25.00	24.69	98.76	70-130
32	2-Methylnaphthalen	25.00	26.99	107.97	70-130
33	Hexachlorocyclopen	25.00	26.68	106.74	70-130
34	2,4,6-Trichlorophe	25.00	25.19	100.75	70-130
35	2,4,5-Trichlorophe	25.00	25.77	103.08	70-130
37	2-Chloronaphthalen	25.00	25.92	103.67	70-130
38	2-Nitroaniline	25.00	27.41	109.65	70-130
39	Dimethylphthalate	25.00	26.38	105.53	70-130
40	Acenaphthylene	25.00	26.48	105.93	70-130
41	2,6-Dinitrotoluene	25.00	26.97	107.89	70-130

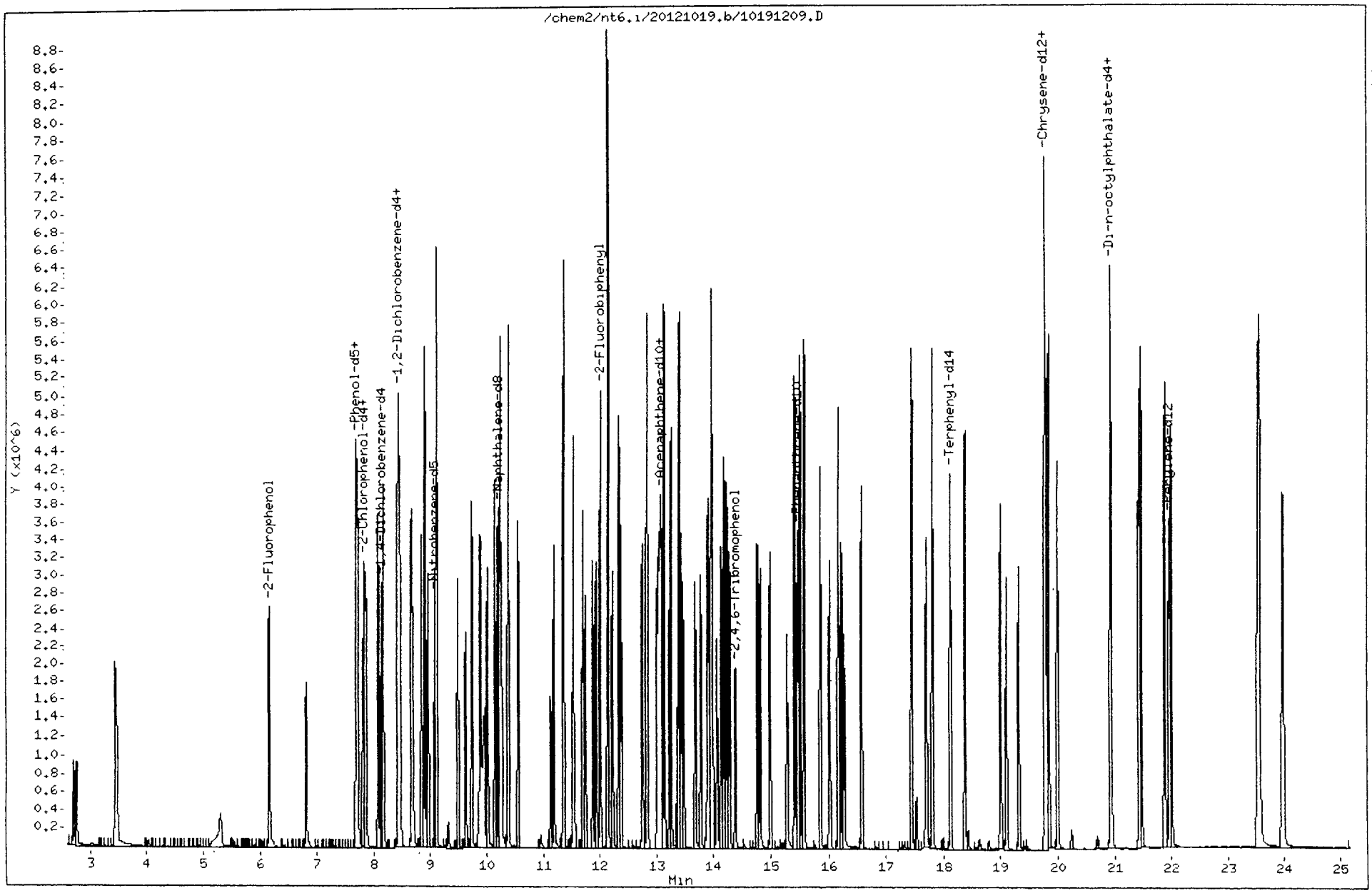
SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
43	3-Nitroaniline	25.00	26.15	104.58	70-130
44	Acenaphthene	25.00	25.63	102.53	70-130
45	2,4-Dinitrophenol	50.00	51.89	103.78	70-130
46	Dibenzofuran	25.00	27.24	108.98	70-130
47	4-Nitrophenol	25.00	26.32	105.26	70-130
48	2,4-Dinitrotoluene	25.00	27.29	109.15	70-130
49	Fluorene	25.00	26.35	105.39	70-130
50	Diethylphthalate	25.00	26.09	104.35	70-130
51	4-Chlorophenyl-phe	25.00	26.23	104.92	70-130
52	4-Nitroaniline	25.00	27.44	109.75	70-130
53	4,6-Dinitro-2-meth	50.00	53.47	106.95	70-130
54	N-Nitrosodiphenyla	25.00	26.42	105.69	70-130
56	4-Bromophenyl-phen	25.00	26.26	105.03	70-130
57	Hexachlorobenzene	25.00	25.78	103.10	70-130
58	Pentachlorophenol	25.00	25.93	103.73	70-130
60	Phenanthrene	25.00	26.50	105.98	70-130
61	Anthracene	25.00	26.68	106.72	70-130
62	Carbazole	25.00	26.10	104.41	70-130
63	Di-n-butylphthalat	25.00	26.93	107.71	70-130
64	Fluoranthene	25.00	27.38	109.52	70-130
65	Pyrene	25.00	25.16	100.63	70-130
67	Butylbenzylphthala	25.00	26.19	104.74	70-130
68	Benzo(a)anthracene	25.00	26.29	105.16	70-130
70	3,3'-Dichlorobenzi	25.00	27.06	108.23	70-130
71	Chrysene	25.00	26.53	106.13	70-130
72	bis(2-Ethylhexyl)p	25.00	25.92	103.67	70-130
73	Di-n-octylphthalat	25.00	26.44	105.74	70-130
74	Benzo(b)fluoranthe	25.00	26.22	104.89	70-130
75	Benzo(k)fluoranthe	25.00	27.80	111.18	70-130
187	Total Benzofluoran	50.00	53.30	106.60	70-130
76	Benzo(a)pyrene	25.00	26.73	106.90	70-130
78	Indeno(1,2,3-cd)py	25.00	25.99	103.98	70-130
79	Dibenzo(a,h)anthra	25.00	26.47	105.87	70-130
80	Benzo(g,h,i)peryle	25.00	25.50	102.01	70-130
90	N-Nitrosodimethyla	25.00	24.55	98.21	70-130
103	Pyridine	25.00	25.23	100.91	70-130
91	Aniline	25.00	25.20	100.79	70-130
105	1-methylnaphthalen	25.00	26.36	105.45	70-130
93	Benzidine	25.00	24.25	97.00	70-130
111	Azobenzene (1,2-DP	25.00	25.76	103.05	70-130
143	1,4-Dioxane	25.00	24.62	98.48	70-130
177	p-Benzoquinone	25.00	29.58	118.34	70-130
98	Retene	25.00	27.48	109.94	70-130
99	Perylene	25.00	26.93	107.71	70-130
133	Butylatedhydroxyto	25.00	27.66	110.63	70-130
115	Tributyl Phosphate	25.00	27.88	111.54	70-130
116	Dibutyl Phenyl Pho	25.00	28.01	112.03	70-130

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
117 Butyl Diphenyl Pho	25.00	26.55	106.21	70-130
118 Triphenyl Phosphat	25.00	27.73	110.91	70-130
123 Acetophenone	25.00	25.20	100.82	70-130
168 Pentachlorobenzene	25.00	26.01	104.05	70-130
113 Diphenyl Oxide	25.00	27.42	109.66	70-130
112 Biphenyl	25.00	26.83	107.34	70-130
120 2,3,4,6-Tetrachlor	25.00	25.82	103.28	70-130
151 1,2,4,5-Tetrachlor	25.00	25.95	103.81	70-130
110 Tetrachloroguaiaco	50.00	56.06	112.12	70-130
109 3,4,5-Trichlorogua	25.00	27.51	110.03	70-130
181 3,4,6-Trichlorogua	25.00	27.43	109.72	70-130
108 4,5,6-Trichlorogua	25.00	28.02	112.06	70-130
184 3,4-Dichloroguaiac	25.00	26.70	106.82	70-130
107 4,5-Dichloroguaiac	50.00	54.60	109.21	70-130
182 4,6-Dichloroguaiac	50.00	54.32	108.63	70-130
185 4-Chloroguaiacol	12.50	12.79	102.29	70-130
106 Guaiacol	25.00	27.00	108.01	70-130
186 Carbaryl	25.00	26.40	105.61	70-130
178 2-Benzyl-4-Chlorop	25.00	28.71	114.85	70-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	25.00	25.03	100.12	75-125
$ 2 Phenol-d5	25.00	25.47	101.90	75-125
$ 5 2-Chlorophenol-d4	25.00	26.10	104.41	75-125
$ 10 1,2-Dichlorobenzen	25.00	25.76	103.06	75-125
$ 18 Nitrobenzene-d5	25.00	26.12	104.46	75-125
$ 36 2-Fluorobiphenyl	25.00	26.25	105.01	75-125
$ 55 2,4,6-Tribromophen	25.00	27.94	111.75	75-125
$ 66 Terphenyl-d14	25.00	25.84	103.37	75-125
$ 137 d8-1,4-Dioxane	25.00	24.74	98.97	75-125

Data File: /chem2/nt6.1/20121019.b/10191209.D
Date : 19-OCT-2012 20:54
Client ID: ICV1019
Sample Info: ICV1019,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.1
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 10191209.D

Lab ID: ICV1019, Method: SW846101912.m, Instrument: nt6.i, Date: 19-OCT-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Semivolatile Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: VR80

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: VR80 Client ID: Anchor QEA, LLC

ARI SOP: **801S**(SIM-PNA) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): 8270D

Instrument: NT-2 NT-4 NT-6 NT-8 NT11

Curve Date: 10/19/12 Analysis Start Date: 11/16/12

DFTPP Tune Meets Criteria?	YES / NO	Internal Standard Meets Criteria?	YES / NO
DDT Breakdown <20%?	YES / NO / NA	Method Blank In Control?	YES / NO
Peak Tailing Factor ≤2?	YES / NO / NA	LCS / LCSD Recovery In Control?	YES / NO
ICal acceptable?	YES / NO	CCal acceptable?	YES / NO
Q flag applied?	YES / NO	Q flag applied?	YES / NO
Surrogate Recovery in Control?	YES / NO	Special Analysis Criteria Met?	YES / NO / NA
Manual Integrations for ICal?	YES / NO	Manual Integrations for Samples?	Yes / NO

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Samples A-D + MB/LCS/LCSD

Forms included

Additional Details on Reverse: Yes / No

Analyst: _____ **Date:** 11/19/12

Reviewer: _____ **Date:** 11/19/12

Analytical Resources Inc.: Organics Instrument Log

NT-6 Serial No.:GC=US00036167, MS=US81221575

Date: 11/16/12 Analysis: 8270D Analyst: [illegible]

GC Program: [illegible] Column No: 7.682 Column Type: ZB-5MSi

Instrument Tune (.U or .CT.): 121019 EM Voltage: 1871

Calibration File: 111620.1 Curve Date: 10/19/12 Injection Vol.: 1µL

IS/SS	Ical/Ccal	LCS/ICV
1998-2	~~2001-1, 2002-1~~	
	~~2003-1, 2004-1~~	
	17363 · 1999-2	
	2027-1, 1999-1	

Document All Maintenance Tasks In StarLIMS

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem2/nt6.i/20121116.b

	Time	Filename	LabID	ClientId	DF															
1	0931	11161201.D	CC1116	CC1116	1	7.63	622823	9.68	2304185	12.55	1424421	14.92	2448750	19.23	2574544	21.38	2732500	20.41	3174976	
2	1005	11161202.D	VR73H	EFF-WT-PC-12	1	7.62	623643	9.68	2241703	12.55	1383921	14.91	2303386	19.22	2421442	20.41	2967793	21.37	2461543	
3	1040	11161203.D	VR73I	EFF-WT-PF-12	1	7.62	613662	9.68	2261757	12.54	1416117	14.92	2388575	19.23	2746392	20.41	3381967	21.39	2898571	
4	1115	11161204.D	VR73J	EFF-WT-PC-12	1	7.62	653421	9.68	2214435	12.55	1368425	14.91	2257670	19.22	2409523	20.41	3028701	21.37	2413111	
5	1150	11161205.D	VO93MBS1	VO93MBS1	1	9.68	1737383	12.54	1035282	14.92	1714447	19.22	1823728	21.37	1745480					
6	1224	11161206.D	VO93LCSS1	VO93LCSS1	1	9.68	1870257	12.55	1106308	14.92	1846064	19.23	1929004	21.38	1905052					
7	1259	11161207.D	VO93AC	SPE017-40G	1	9.68	1859252	12.54	1111527	14.92	1841437	19.22	1929857	21.37	1862216					
8	1334	11161208.D	VO93LCSS1	VO93LCSS1	1	7.62	478292	9.68	1805968	12.55	1088519	14.92	1808100	19.23	1828561	20.41	2307218	21.38	1834482	
9	1408	11161209.D	VQ71MBW1	VQ71MBW1	1	7.62	526703	9.68	1871919	12.54	1081980	14.91	1799627	19.22	1969854	20.41	2474308	21.37	2021255	
10	1442	11161210.D	VQ71A	LOD1	1	7.62	527833	9.68	1880219	12.54	1093560	14.92	1809741	19.22	1999292	20.41	2502008	21.37	2012892	
11	1517	11161211.D	VR68MBW1	VR68MBW1	1	7.62	504485	9.68	1826763	12.55	1058823	14.91	1749669	19.22	1874767	20.40	2337937	21.37	1863467	
12	1551	11161212.D	VR68LCSW1	VR68LCSW1	1	7.63	506819	9.68	1900071	12.55	1155257	14.92	1934043	19.22	1901534	20.41	2400868	21.38	2079546	
13	1626	11161213.D	VR68LCSDW1	VR68LCSDW1	1	7.62	487757	9.69	1795927	12.55	1089658	14.92	1854195	19.23	1906894	20.41	2372532	21.37	1972057	
14	1700	11161214.D	VR68A	LS431-W-1108	1	7.62	547519	9.68	1957930	12.54	1151706	14.92	1903764	19.22	1989502	20.41	2520761	21.37	2007476	
15	1735	11161215.D	VR80MBW1	VR80MBW1	1	7.62	496715	9.68	1813315	12.54	1059308	14.91	1750868	19.22	1819846	20.41	2224125	21.37	1791563	
16	1810	11161216.D	VR80LCSW1	VR80LCSW1	1	7.62	511708	9.68	1874895	12.55	1124622	14.92	1932614	19.22	1948280	20.41	2424873	21.37	2042796	
17	1844	11161217.D	VR80LCSDW1	VR80LCSDW1	1	7.62	541418	9.68	1959285	12.55	1185684	14.92	1999848	19.23	2041068	20.41	2587008	21.38	2227912	
18	1919	11161218.D	VR80A	HT-01-W-C-12	1	7.62	464086	9.68	1650639	12.54	995520	14.91	1624314	19.21	1749260	20.40	2218777	21.37	1713738	
19	1954	11161219.D	VR80B	HT-04-W-C-12	1	7.62	544820	9.68	1924677	12.54	1156089	14.92	1887865	19.22	2044893	20.41	2579354	21.37	2003420	
20	2028	11161220.D	VR80C	HT-04-W-C-du	1	7.62	546597	9.68	1944802	12.54	1145634	14.91	1884886	19.22	2000842	20.41	2566892	21.37	1971443	
21	2102	11161221.D	VR80D	WS-10-W-C-12	1	7.62	537645	9.68	1898784	12.54	1094618	14.92	1845455	19.22	1883234	20.41	2418062	21.37	1879682	

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

[signature] 11/19/12

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/nt6.i/20121116.b

ARI Job No.: CC11 Method: SW846101912.m Instrument: nt6.i Date: 16-NOV-2012

11/19/12

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0931	11161201.D	CC1116	CC1116	1	NO MANUAL INTEGRATION
1735	11161215.D	VR80MBW1	VR80MBW1	1	NO MANUAL INTEGRATION
1810	11161216.D	VR80LCSW1	VR80LCSW1	1	NO MANUAL INTEGRATION
1844	11161217.D	VR80LCSDW1	VR80LCSDW1	1	NO MANUAL INTEGRATION
1919	11161218.D	VR80A	HT-01-W-C-	1	NO MANUAL INTEGRATION
1954	11161219.D	VR80B	HT-04-W-C-	1	NO MANUAL INTEGRATION
2028	11161220.D	VR80C	HT-04-W-C-	1	NO MANUAL INTEGRATION
2102	11161221.D	VR80D	WS-10-W-C-	1	NO MANUAL INTEGRATION

Q-FLAG SUMMARY FOR DATABATCH - /chem2/nt6.i/20121116.b

Instrument: nt6.i Date: 16-NOV-2012 Method: SW846101912.m

INITIAL CAL: 19-OCT-2012

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 16-NOV-2012

Compound	%D
Hexachlorocyclopentadiene	-27.6
2,4-Dinitrophenol	-23.4 ✓ NTC

11/16/12

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i
Lab File ID: 11161201.D
Analysis Type: WATER
Lab Sample ID: CC1116
Method: /chem2/nt6.i/20121116.b/SW846101912.m

Injection Date: 16-NOV-2012 09:31
Init. Cal. Date(s): 19-OCT-2012 19-OCT-2012
Init. Cal. Times: 16:20 20:20
Quant Type: ISTD

11/16/12

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
$ 1 2-Fluorophenol	1.33134	1.28353	1.28353	0.010	-3.59159	20.00000	Averaged	
$ 2 Phenol-d5	1.65257	1.64005	1.64005	0.010	-0.75744	20.00000	Averaged	
3 Phenol	1.73114	1.78271	1.78271	0.010	2.97874	20.00000	Averaged	
$ 5 2-Chlorophenol-d4	1.36713	1.37017	1.37017	0.010	0.22214	20.00000	Averaged	
4 Bis(2-Chloroethyl)ether	1.37027	1.29809	1.29809	0.010	-5.26760	20.00000	Averaged	
6 2-Chlorophenol	1.43369	1.46751	1.46751	0.010	2.35935	20.00000	Averaged	
7 1,3-Dichlorobenzene	1.60637	1.56003	1.56003	0.010	-2.88477	20.00000	Averaged	
9 1,4-Dichlorobenzene	1.58433	1.54813	1.54813	0.010	-2.28535	20.00000	Averaged	
$ 10 1,2-Dichlorobenzene-d4	0.98069	0.98398	0.98398	0.010	0.33579	20.00000	Averaged	
12 1,2-Dichlorobenzene	1.50976	1.45144	1.45144	0.010	-3.86281	20.00000	Averaged	
11 Benzyl alcohol	1.15082	1.10126	1.10126	0.010	-4.30672	20.00000	Averaged	
14 2,2'-oxybis(1-Chloropropane	1.92161	1.94236	1.94236	0.010	1.07995	20.00000	Averaged	
13 2-Methylphenol	1.30807	1.34036	1.34036	0.010	2.46869	20.00000	Averaged	
17 Hexachloroethane	0.63231	0.59749	0.59749	0.010	-5.50674	20.00000	Averaged	
16 N-Nitroso-di-n-propylamine	0.96974	0.96676	0.96676	0.005	-0.30787	20.00000	Averaged	
15 4-Methylphenol	1.34844	1.44358	1.44358	0.010	7.05539	20.00000	Averaged	
$ 18 Nitrobenzene-d5	0.42236	0.40130	0.40130	0.010	-4.98664	20.00000	Averaged	
19 Nitrobenzene	0.41256	0.39965	0.39965	0.010	-3.12751	20.00000	Averaged	
20 Isophorone	0.63789	0.59951	0.59951	0.010	-6.01713	20.00000	Averaged	
21 2-Nitrophenol	0.20518	0.21976	0.21976	0.010	7.10531	20.00000	Averaged	
22 2,4-Dimethylphenol	0.37168	0.37897	0.37897	0.010	1.96066	20.00000	Averaged	
23 Bis(2-Chloroethoxy)methane	0.45563	0.42072	0.42072	0.010	-7.66162	20.00000	Averaged	
24 Benzoic acid	0.25631	0.26271	0.26271	0.010	2.49419	20.00000	Averaged	
25 2,4-Dichlorophenol	0.30956	0.33383	0.33383	0.010	7.84051	20.00000	Averaged	
26 1,2,4-Trichlorobenzene	0.35337	0.34468	0.34468	0.010	-2.45897	20.00000	Averaged	
28 Naphthalene	1.17924	1.10869	1.10869	0.010	-5.98270	20.00000	Averaged	
29 4-Chloroaniline	27.93241	25.00000	0.53001	0.010	11.72965	20.00000	Quadratic	
30 Hexachlorobutadiene	0.21412	0.21390	0.21390	0.010	-0.10316	20.00000	Averaged	
31 4-Chloro-3-methylphenol	0.30107	0.33092	0.33092	0.010	9.91557	20.00000	Averaged	
32 2-Methylnaphthalene	0.67351	0.71552	0.71552	0.010	6.23625	20.00000	Averaged	
33 Hexachlorocyclopentadiene	0.37468	0.27120	0.27120	0.010	-27.61858	20.00000	Averaged	<-
34 2,4,6-Trichlorophenol	0.38375	0.38962	0.38962	0.010	1.53123	20.00000	Averaged	
35 2,4,5-Trichlorophenol	0.40282	0.42418	0.42418	0.010	5.30452	20.00000	Averaged	
$ 36 2-Fluorobiphenyl	1.32750	1.27670	1.27670	0.010	-3.82639	20.00000	Averaged	
37 2-Chloronaphthalene	1.11613	1.05229	1.05229	0.010	-5.71991	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i
Lab File ID: 11161201.D
Analysis Type: WATER
Lab Sample ID: CC1116
Method: /chem2/nt6.i/20121116.b/SW846101912.m

Injection Date: 16-NOV-2012 09:31
Init. Cal. Date(s): 19-OCT-2012 19-OCT-2012
Init. Cal. Times: 16:20 20:20
Quant Type: ISTD

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE	
38 2-Nitroaniline	0.42251	0.44375	0.44375	0.010	5.02611	20.00000	Averaged	
39 Dimethylphthalate	1.21872	1.19287	1.19287	0.010	-2.12139	20.00000	Averaged	
40 Acenaphthylene	1.95613	1.90464	1.90464	0.010	-2.63252	20.00000	Averaged	
41 2,6-Dinitrotoluene	0.28423	0.29233	0.29233	0.010	2.85120	20.00000	Averaged	
43 3-Nitroaniline	0.36515	0.36191	0.36191	0.010	-0.88642	20.00000	Averaged	
44 Acenaphthene	1.26528	1.19987	1.19987	0.010	-5.16910	20.00000	Averaged	
45 2,4-Dinitrophenol	38.29815	50.00000	0.10819	0.010	-23.40369	20.00000	Quadratic	<-
46 Dibenzofuran	1.87078	1.97182	1.97182	0.010	5.40069	20.00000	Averaged	
47 4-Nitrophenol	0.14917	0.15085	0.15085	0.010	1.12329	20.00000	Averaged	
48 2,4-Dinitrotoluene	0.36573	0.38179	0.38179	0.010	4.38901	20.00000	Averaged	
50 Diethylphthalate	1.25899	1.18695	1.18695	0.010	-5.72214	20.00000	Averaged	
49 Fluorene	1.37372	1.33093	1.33093	0.010	-3.11458	20.00000	Averaged	
51 4-Chlorophenyl-phenylether	0.64778	0.65054	0.65054	0.010	0.42631	20.00000	Averaged	
52 4-Nitroaniline	0.33857	0.38398	0.38398	0.010	13.41353	20.00000	Averaged	
53 4,6-Dinitro-2-methylphenol	0.13030	0.12047	0.12047	0.010	-7.54578	20.00000	Averaged	
54 N-Nitrosodiphenylamine	0.60620	0.54647	0.54647	0.010	-9.85378	20.00000	Averaged	
$ 55 2,4,6-Tribromophenol	0.17057	0.18946	0.18946	0.010	11.07590	20.00000	Averaged	
56 4-Bromophenyl-phenylether	0.24388	0.22626	0.22626	0.010	-7.22280	20.00000	Averaged	
57 Hexachlorobenzene	0.25193	0.23171	0.23171	0.010	-8.02698	20.00000	Averaged	
58 Pentachlorophenol	0.14387	0.11879	0.11879	0.010	-17.42806	20.00000	Averaged	
60 Phenanthrene	1.18107	1.12522	1.12522	0.010	-4.72904	20.00000	Averaged	
61 Anthracene	1.21224	1.15183	1.15183	0.010	-4.98333	20.00000	Averaged	
62 Carbazole	0.97409	0.92281	0.92281	0.010	-5.26405	20.00000	Averaged	
63 Di-n-butylphthalate	1.20772	1.16961	1.16961	0.010	-3.15554	20.00000	Averaged	
64 Fluoranthene	1.23814	1.26101	1.26101	0.010	1.84648	20.00000	Averaged	
65 Pyrene	1.40313	1.23972	1.23972	0.010	-11.64614	20.00000	Averaged	
$ 66 Terphenyl-d14	0.73613	0.69622	0.69622	0.010	-5.42200	20.00000	Averaged	
67 Butylbenzylphthalate	0.55324	0.52185	0.52185	0.010	-5.67280	20.00000	Averaged	
68 Benzo(a)anthracene	1.18836	1.16355	1.16355	0.010	-2.08795	20.00000	Averaged	
70 3,3'-Dichlorobenzidine	0.33449	0.35835	0.35835	0.010	7.13454	20.00000	Averaged	
71 Chrysene	1.15729	1.11281	1.11281	0.010	-3.84348	20.00000	Averaged	
72 bis(2-Ethylhexyl)phthalate	0.63078	0.56499	0.56499	0.010	-10.43097	20.00000	Averaged	
73 Di-n-octylphthalate	1.04908	0.96232	0.96232	0.010	-8.27054	20.00000	Averaged	
74 Benzo(b)fluoranthene	1.18414	1.15819	1.15819	0.010	-2.19108	20.00000	Averaged	
75 Benzo(k)fluoranthene	1.20975	1.17670	1.17670	0.010	-2.73185	20.00000	Averaged	

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt6.i Injection Date: 16-NOV-2012 09:31
Lab File ID: 11161201.D Init. Cal. Date(s): 19-OCT-2012 19-OCT-2012
Analysis Type: WATER Init. Cal. Times: 16:20 20:20
Lab Sample ID: CC1116 Quant Type: ISTD
Method: /chem2/nt6.i/20121116.b/SW846101912.m

COMPOUND	RRF / AMOUNT	RF25	CCAL RRF25	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
187 Total Benzofluoranthenes	1.14870	1.09994	1.09994	0.010	-4.24503	20.00000	Averaged
76 Benzo(a)pyrene	1.10513	1.05546	1.05546	0.010	-4.49467	20.00000	Averaged
78 Indeno(1,2,3-cd)pyrene	1.52376	1.28969	1.28969	0.010	-15.36188	20.00000	Averaged
79 Dibenzo(a,h)anthracene	1.23336	1.06464	1.06464	0.010	-13.67960	20.00000	Averaged
80 Benzo(g,h,i)perylene	1.33504	1.07037	1.07037	0.010	-19.82463	20.00000	Averaged
90 N-Nitrosodimethylamine	0.90263	0.77386	0.77386	0.010	-14.26612	20.00000	Averaged
103 Pyridine	1.54148	1.31214	1.31214	0.010	-14.87770	20.00000	Averaged
91 Aniline	2.38525	2.37719	2.37719	0.010	-0.33813	20.00000	Averaged
105 1-methylnaphthalene	0.48726	0.49969	0.49969	0.010	2.55045	20.00000	Averaged
111 Azobenzene (1,2-DP-Hydrazin	1.29692	1.36855	1.36855	0.010	5.52336	20.00000	Averaged
144 alpha-Terpineol	0.25655	0.26591	0.26591	0.010	3.64629	20.00000	Averaged
99 Perylene	0.90006	0.86251	0.86251	0.010	-4.17158	20.00000	Averaged
120 2,3,4,6-Tetrachlorophenol	0.33123	0.35369	0.35369	0.010	6.78040	20.00000	Averaged
151 1,2,4,5-Tetrachlorobenzene	0.56505	0.52191	0.52191	0.010	-7.63500	20.00000	Averaged

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121116.b/11161201.D
Lab Smp Id: CC1116 Client Smp ID: CC1116
Inj Date : 16-NOV-2012 09:31
Operator : JZ Inst ID: nt6.i
Smp Info : CC1116
Misc Info : 12-
Comment : 1ul Injection
Method : /chem2/nt6.i/20121116.b/SW846101912.m
Meth Date : 16-Nov-2012 12:36 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 20:20 Cal File: 10191208.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICALA.sub
Target Version: 3.50

11/16/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
$ 1 2-Fluorophenol	112	5.713	5.713	(0.749)	999263	25.0000	24.10
$ 2 Phenol-d5	99	7.321	7.321	(0.960)	1276831	25.0000	24.81
3 Phenol	94	7.337	7.337	(0.962)	1387889	25.0000	25.74
$ 5 2-Chlorophenol-d4	132	7.358	7.358	(0.965)	1066719	25.0000	25.06
4 Bis(2-Chloroethyl)ether	93	7.316	7.316	(0.959)	1010598	25.0000	23.68
6 2-Chlorophenol	128	7.385	7.385	(0.968)	1142502	25.0000	25.59
7 1,3-Dichlorobenzene	146	7.561	7.561	(0.992)	1214530	25.0000	24.28
* 8 1,4-Dichlorobenzene-d4	152	7.625	7.625	(1.000)	622823	20.0000	
9 1,4-Dichlorobenzene	146	7.652	7.652	(1.004)	1205261	25.0000	24.43
$ 10 1,2-Dichlorobenzene-d4	152	7.925	7.925	(1.039)	766060	25.0000	25.08
12 1,2-Dichlorobenzene	146	7.946	7.946	(1.042)	1129988	25.0000	24.03
11 Benzyl alcohol	108	7.962	7.962	(1.044)	857361	25.0000	23.92
14 2,2'-oxybis(1-Chloropropane)	45	8.192	8.192	(1.074)	1512187	25.0000	25.27
13 2-Methylphenol	108	8.245	8.245	(1.081)	1043511	25.0000	25.62
17 Hexachloroethane	117	8.437	8.437	(1.106)	465163	25.0000	23.62
16 N-Nitroso-di-n-propylamine	70	8.421	8.421	(1.104)	752648	25.0000	24.92

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	15 4-Methylphenol	108	8.485	8.485	(1.113)	1123871	25.0000	26.76
$	18 Nitrobenzene-d5	82	8.571	8.571	(0.885)	1155835	25.0000	23.75
	19 Nitrobenzene	77	8.603	8.603	(0.889)	1151096	25.0000	24.22
	20 Isophorone	82	8.993	8.993	(0.929)	1726731	25.0000	23.50
	21 2-Nitrophenol	139	9.121	9.121	(0.942)	632949	25.0000	26.78
	22 2,4-Dimethylphenol	107	9.297	9.297	(0.960)	1091517	25.0000	25.49
	23 Bis(2-Chloroethoxy)methane	93	9.399	9.399	(0.971)	1211777	25.0000	23.08
	24 Benzoic acid	105	9.618	9.618	(0.993)	1513314	50.0000	51.25
	25 2,4-Dichlorophenol	162	9.549	9.549	(0.986)	961510	25.0000	26.96
	26 1,2,4-Trichlorobenzene	180	9.634	9.634	(0.995)	992768	25.0000	24.39
*	27 Naphthalene-d8	136	9.682	9.682	(1.000)	2304185	20.0000	
	28 Naphthalene	128	9.714	9.714	(1.003)	3193279	25.0000	23.50
	29 4-Chloroaniline	127	9.890	9.890	(1.022)	1526543	25.0000	27.93
	30 Hexachlorobutadiene	225	10.045	10.045	(1.038)	616089	25.0000	24.97
	31 4-Chloro-3-methylphenol	107	10.767	10.767	(1.112)	953134	25.0000	27.48
	32 2-Methylnaphthalene	141	10.841	10.841	(1.120)	2060849	25.0000	26.56
	33 Hexachlorocyclopentadiene	237	11.226	11.226	(0.894)	482879	25.0000	18.10
	34 2,4,6-Trichlorophenol	196	11.386	11.386	(0.907)	693734	25.0000	25.38
	35 2,4,5-Trichlorophenol	196	11.472	11.472	(0.914)	755270	25.0000	26.33
$	36 2-Fluorobiphenyl	172	11.498	11.498	(0.916)	2273199	25.0000	24.04
	37 2-Chloronaphthalene	162	11.616	11.616	(0.926)	1873632	25.0000	23.57
	38 2-Nitroaniline	65	11.883	11.883	(0.947)	790100	25.0000	26.26
	39 Dimethylphthalate	163	12.257	12.257	(0.977)	2123930	25.0000	24.47
	40 Acenaphthylene	152	12.294	12.294	(0.980)	3391258	25.0000	24.34
	41 2,6-Dinitrotoluene	165	12.342	12.342	(0.983)	520501	25.0000	25.71
*	42 Acenaphthene-d10	164	12.551	12.551	(1.000)	1424421	20.0000	
	43 3-Nitroaniline	138	12.572	12.572	(1.002)	644388	25.0000	24.78
	44 Acenaphthene	153	12.599	12.599	(1.004)	2136409	25.0000	23.71
	45 2,4-Dinitrophenol	184	12.727	12.727	(1.014)	385274	50.0000	38.30
	46 Dibenzofuran	168	12.866	12.866	(1.025)	3510877	25.0000	26.35
	47 4-Nitrophenol	109	12.978	12.978	(1.034)	268584	25.0000	25.28
	48 2,4-Dinitrotoluene	165	12.968	12.968	(1.033)	679780	25.0000	26.10
	50 Diethylphthalate	149	13.411	13.411	(1.069)	2113394	25.0000	23.57
	49 Fluorene	166	13.422	13.422	(1.069)	2369758	25.0000	24.22
	51 4-Chlorophenyl-phenylether	204	13.454	13.454	(1.072)	1158306	25.0000	25.11
	52 4-Nitroaniline	138	13.571	13.571	(1.081)	683684	25.0000	28.35
	53 4,6-Dinitro-2-methylphenol	198	13.630	13.630	(0.913)	737498	50.0000	46.23
	54 N-Nitrosodiphenylamine	169	13.673	13.673	(0.916)	1672699	25.0000	22.54
$	55 2,4,6-Tribromophenol	330	13.854	13.854	(1.104)	337345	25.0000	27.77
	56 4-Bromophenyl-phenylether	248	14.234	14.234	(0.954)	692569	25.0000	23.19
	57 Hexachlorobenzene	284	14.442	14.442	(0.968)	709237	25.0000	22.99
	58 Pentachlorophenol	266	14.768	14.768	(0.990)	363618	25.0000	20.64
*	59 Phenanthrene-d10	188	14.923	14.923	(1.000)	2448750	20.0000	
	60 Phenanthrene	178	14.955	14.955	(1.002)	3444225	25.0000	23.82
	61 Anthracene	178	15.030	15.030	(1.007)	3525682	25.0000	23.75
	62 Carbazole	167	15.334	15.334	(1.028)	2824663	25.0000	23.68
	63 Di-n-butylphthalate	149	16.061	16.061	(1.076)	3580114	25.0000	24.21

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	64 Fluoranthene	202	16.889	16.889	(1.132)	3859863	25.0000	25.46
	65 Pyrene	202	17.241	17.241	(0.897)	3989626	25.0000	22.09
$	66 Terphenyl-d14	244	17.572	17.572	(0.914)	2240566	25.0000	23.64
	67 Butylbenzylphthalate	149	18.470	18.470	(0.961)	1679413	25.0000	23.58
	68 Benzo(a)anthracene	228	19.207	19.207	(0.999)	3744514	25.0000	24.48
*	69 Chrysene-d12	240	19.228	19.228	(1.000)	2574544	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.228	19.228	(1.000)	1153235	25.0000	26.78
	71 Chrysene	228	19.271	19.271	(1.002)	3581230	25.0000	24.04
	72 bis(2-Ethylhexyl)phthalate	149	19.480	19.480	(0.954)	2242269	25.0000	22.39
*	134 Di-n-octylphthalate-d4	153	20.409	20.409	(1.000)	3174976	20.0000	
	73 Di-n-octylphthalate	149	20.420	20.420	(1.001)	3819177	25.0000	22.93
	74 Benzo(b)fluoranthene	252	20.858	20.858	(0.976)	3955943	25.0000	24.45
	75 Benzo(k)fluoranthene	252	20.895	20.895	(0.977)	4019162	25.0000	24.32
	187 Total Benzofluoranthenes	252	20.895	20.895	(0.977)	7513962	50.0000	47.88
	76 Benzo(a)pyrene	252	21.301	21.301	(0.996)	3605050	25.0000	23.88
*	77 Perylene-d12	264	21.381	21.381	(1.000)	2732500	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	22.781	22.781	(1.065)	4405083	25.0000	21.16
	79 Dibenzo(a,h)anthracene	278	22.813	22.813	(1.067)	3636417	25.0000	21.58
	80 Benzo(g,h,i)perylene	276	23.150	23.150	(1.083)	3655996	25.0000	20.04
	90 N-Nitrosodimethylamine	74	2.785	2.785	(0.365)	602475	25.0000	21.43
	103 Pyridine	79	2.753	2.753	(0.361)	1021541	25.0000	21.28
	91 Aniline	93	7.198	7.198	(0.944)	1850711	25.0000	24.92
	105 1-methylnaphthalene	141	11.012	11.012	(1.137)	1439220	25.0000	25.64
	111 Azobenzene (1,2-DP-Hydrazine)	77	13.705	13.705	(1.092)	2436747	25.0000	26.38
	144 alpha-Terpineol	59	9.768	9.768	(1.009)	765869	25.0000	25.91
	99 Perylene	252	21.419	21.419	(1.002)	2946022	25.0000	23.96
	120 2,3,4,6-Tetrachlorophenol	232	13.171	13.171	(1.049)	629755	25.0000	26.70
	151 1,2,4,5-Tetrachlorobenzene	216	11.183	11.183	(0.891)	929275	25.0000	23.09

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 11161201.D
Lab Smp Id: CC1116
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-

Calibration Date: 16-NOV-2012
Calibration Time: 09:31
Client Smp ID: CC1116
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

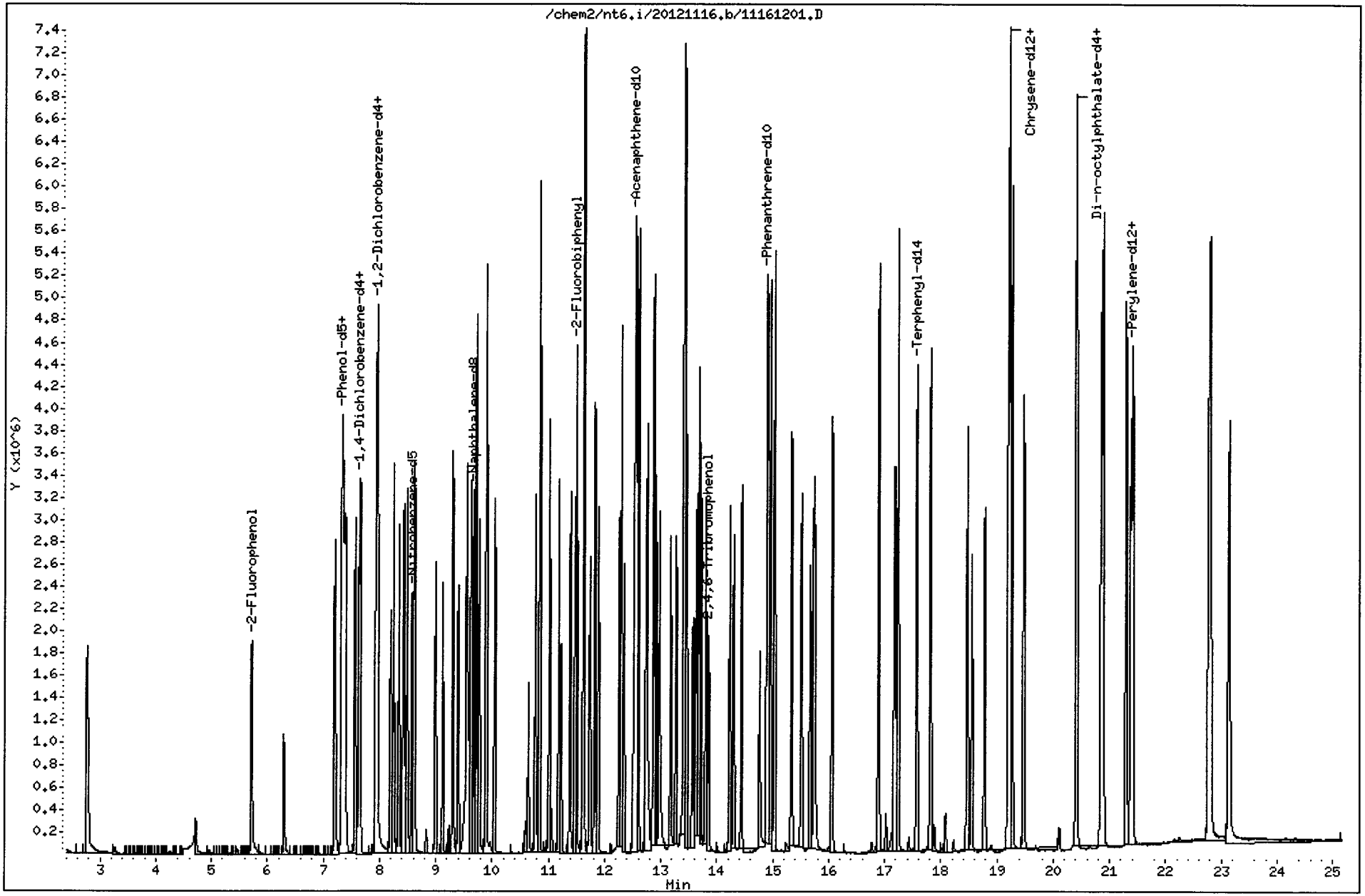
COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	622823	-15.37
27 Naphthalene-d8	2597762	1298881	5195524	2304185	-11.30
42 Acenaphthene-d10	1503943	751972	3007886	1424421	-5.29
59 Phenanthrene-d10	2402003	1201002	4804006	2448750	1.95
69 Chrysene-d12	2331938	1165969	4663876	2574544	10.40
134 Di-n-octylphthala	2790605	1395302	5581210	3174976	13.77
77 Perylene-d12	2485610	1242805	4971220	2732500	9.93

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.63	7.13	8.13	7.63	0.00
27 Naphthalene-d8	9.68	9.18	10.18	9.68	0.00
42 Acenaphthene-d10	12.55	12.05	13.05	12.55	0.00
59 Phenanthrene-d10	14.92	14.42	15.42	14.92	0.00
69 Chrysene-d12	19.23	18.73	19.73	19.23	0.00
134 Di-n-octylphthala	20.41	19.91	20.91	20.41	0.00
77 Perylene-d12	21.38	20.88	21.88	21.38	0.00

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

Data File: /chem2/nt6.i/20121116.b/11161201.D
Date : 16-NOV-2012 09:31
Client ID: CC1116
Sample Info: CC1116
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 11161201.D

Lab ID: CC1116, Method: SW846101912.m, Instrument: nt6.i, Date: 16-NOV-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Data File: /chem2/nt6.i/20121116.b/tune.b/11161201.D

Date : 16-NOV-2012 09:31

Client ID: DFTPP1116

Instrument: nt6.i

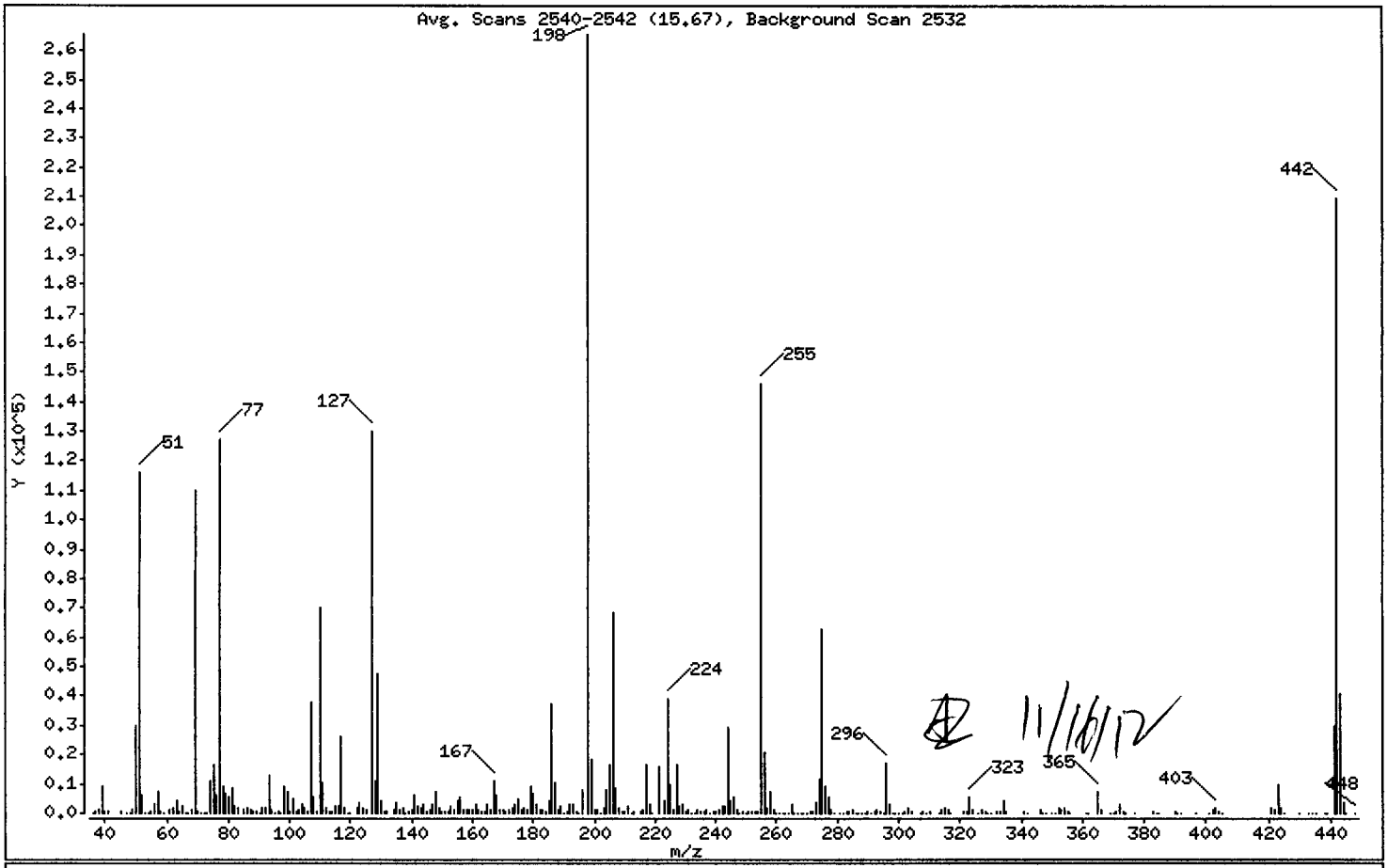
Sample Info: DFTPP1116

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	43.70
68	Less than 2.00% of mass 69	0.45 (1.09)
69	Mass 69 relative abundance	41.27
70	Less than 2.00% of mass 69	0.27 (0.65)
127	10.00 - 80.00% of mass 198	48.87
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.84
275	10.00 - 60.00% of mass 198	23.60
365	Greater than 1.00% of mass 198	2.84
441	0.01 - 24.00% of mass 442	11.26 (14.29)
442	50.00 - 200.00% of mass 198	78.77
443	15.00 - 24.00% of mass 442	15.43 (19.59)

Data File: /chem2/nt6.i/20121116.b/tune.b/11161201.D

Date : 16-NOV-2012 09:31

Client ID: DFTPP1116

Instrument: nt6.i

Sample Info: DFTPP1116

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32

Data File: 11161201.D

Spectrum: Avg. Scans 2540-2542 (15.67), Background Scan 2532

Location of Maximum: 198.00

Number of points: 329

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	47	127.00	129800	212.00	155	299.00	81
37.00	440	128.00	10707	213.00	404	300.00	59
38.00	992	129.00	47824	215.00	517	301.00	298
39.00	9189	130.00	4261	216.00	1447	302.00	491
40.00	563	131.00	780	217.00	16752	303.00	1945
41.00	482	132.00	902	218.00	2967	304.00	533
45.00	332	134.00	1423	219.00	241	307.00	54
47.00	203	135.00	3739	221.00	15570	308.00	332
48.00	123	136.00	1519	223.00	4284	309.00	133
49.00	932	137.00	1935	224.00	38920	310.00	386
50.00	29680	138.00	127	225.00	9641	313.00	273
51.00	116064	139.00	357	226.00	1191	314.00	918
52.00	6015	140.00	1462	227.00	16512	315.00	2052
53.00	195	141.00	5888	228.00	2246	316.00	1019
54.00	58	142.00	2389	229.00	3140	317.00	234
55.00	327	143.00	1677	230.00	414	321.00	565
56.00	2969	144.00	2900	231.00	1394	322.00	320
57.00	7275	145.00	854	232.00	112	323.00	5670
58.00	437	146.00	1235	233.00	189	324.00	1268
59.00	150	147.00	2952	234.00	967	326.00	222
61.00	930	148.00	7232	235.00	856	327.00	1163
62.00	1784	149.00	2046	236.00	642	328.00	744
63.00	4484	150.00	483	237.00	1110	329.00	197
64.00	633	151.00	859	238.00	196	330.00	118
65.00	2478	152.00	775	239.00	578	332.00	450
66.00	188	153.00	2362	240.00	415	333.00	590
67.00	229	154.00	1338	241.00	1190	334.00	4262
68.00	1198	155.00	4259	242.00	2176	335.00	814
69.00	109624	156.00	5511	243.00	2164	341.00	574
70.00	710	157.00	994	244.00	29320	342.00	184
71.00	33	158.00	1327	245.00	4448	346.00	1191
72.00	215	159.00	1267	246.00	5392	347.00	239
73.00	255	160.00	1453	247.00	1122	348.00	55
74.00	10774	161.00	3114	248.00	263	350.00	243
75.00	16376	162.00	942	249.00	829	351.00	75

Data File: /chem2/nt6.i/20121116.b/tune.b/11161201.D

Date : 16-NOV-2012 09:31

Client ID: DFTPP1116 Instrument: nt6.i

Sample Info: DFTPP1116

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 11161201.D
Spectrum: Avg. Scans 2540-2542 (15.67), Background Scan 2532
Location of Maximum: 198.00
Number of points: 329

m/z	Y	m/z	Y	m/z	Y	m/z	Y
76.00	5879	163.00	617	250.00	136	352.00	1563
77.00	126704	164.00	311	251.00	379	353.00	1235
78.00	9245	165.00	2982	252.00	355	354.00	1742
79.00	6521	166.00	1257	253.00	651	355.00	364
80.00	5307	167.00	11261	254.00	399	356.00	51
81.00	8254	168.00	5884	255.00	146112	361.00	50
82.00	2479	169.00	1142	256.00	21016	362.00	62
83.00	1690	170.00	950	257.00	1821	365.00	7552
85.00	1508	171.00	756	258.00	7515	366.00	1268
86.00	2033	172.00	1178	259.00	1261	369.00	59
87.00	1176	173.00	1590	260.00	277	370.00	125
88.00	882	174.00	2911	261.00	224	371.00	470
89.00	551	175.00	4730	262.00	211	372.00	3117
90.00	135	176.00	1388	263.00	56	373.00	743
91.00	1744	177.00	1957	264.00	25	374.00	64
92.00	2113	178.00	921	265.00	3331	377.00	180
93.00	12658	179.00	8972	266.00	190	383.00	795
94.00	1322	180.00	6877	267.00	129	384.00	287
95.00	246	181.00	2997	268.00	144	385.00	53
96.00	687	182.00	933	269.00	160	390.00	384
97.00	176	183.00	1332	270.00	224	391.00	256
98.00	9383	184.00	700	271.00	335	392.00	189
99.00	7311	185.00	4329	272.00	339	397.00	65
100.00	762	186.00	37136	273.00	3419	401.00	97
101.00	4995	187.00	10636	274.00	11670	402.00	1251
102.00	468	188.00	981	275.00	62672	403.00	1950
103.00	1423	189.00	2490	276.00	9076	404.00	520
104.00	2934	190.00	50	277.00	5193	405.00	92
105.00	2115	191.00	865	278.00	1066	421.00	1747
106.00	407	192.00	2985	279.00	64	422.00	1371
107.00	37632	193.00	3303	281.00	143	423.00	9973
108.00	5485	194.00	846	282.00	193	424.00	2086
109.00	915	195.00	171	283.00	395	425.00	261
110.00	70232	196.00	7708	284.00	440	430.00	57
111.00	10223	198.00	265600	285.00	1040	433.00	177

Data File: /chem2/nt6.i/20121116.b/tune.b/11161201.D

Date : 16-NOV-2012 09:31

Client ID: DFTPP1116 Instrument: nt6.i

Sample Info: DFTPP1116

Operator: JZ

Column phase: ZB-5msi Column diameter: 0.32

Data File: 11161201.D
Spectrum: Avg. Scans 2540-2542 (15.67), Background Scan 2532
Location of Maximum: 198.00
Number of points: 329

m/z	Y	m/z	Y	m/z	Y	m/z	Y
112.00	1643	199.00	18168	286.00	261	434.00	55
113.00	794	200.00	1272	287.00	201	435.00	53
114.00	680	201.00	975	288.00	56	438.00	65
115.00	2322	202.00	166	289.00	284	439.00	79
116.00	2532	203.00	1947	290.00	366	441.00	29896
117.00	26344	204.00	8230	291.00	231	442.00	209216
118.00	1784	205.00	16288	292.00	465	443.00	40992
119.00	20	206.00	68648	293.00	1471	444.00	3958
120.00	244	207.00	8475	294.00	355	445.00	174
122.00	1729	208.00	2017	295.00	227	448.00	61
123.00	3659	209.00	398	296.00	17392		
124.00	1795	210.00	766	297.00	2916		
125.00	1016	211.00	2564	298.00	90		

Data File: /chem2/nt6.i/20121116.b/tune.b/11161201.D

Date : 16-NOV-2012 09:31

Client ID: DFTPP1116

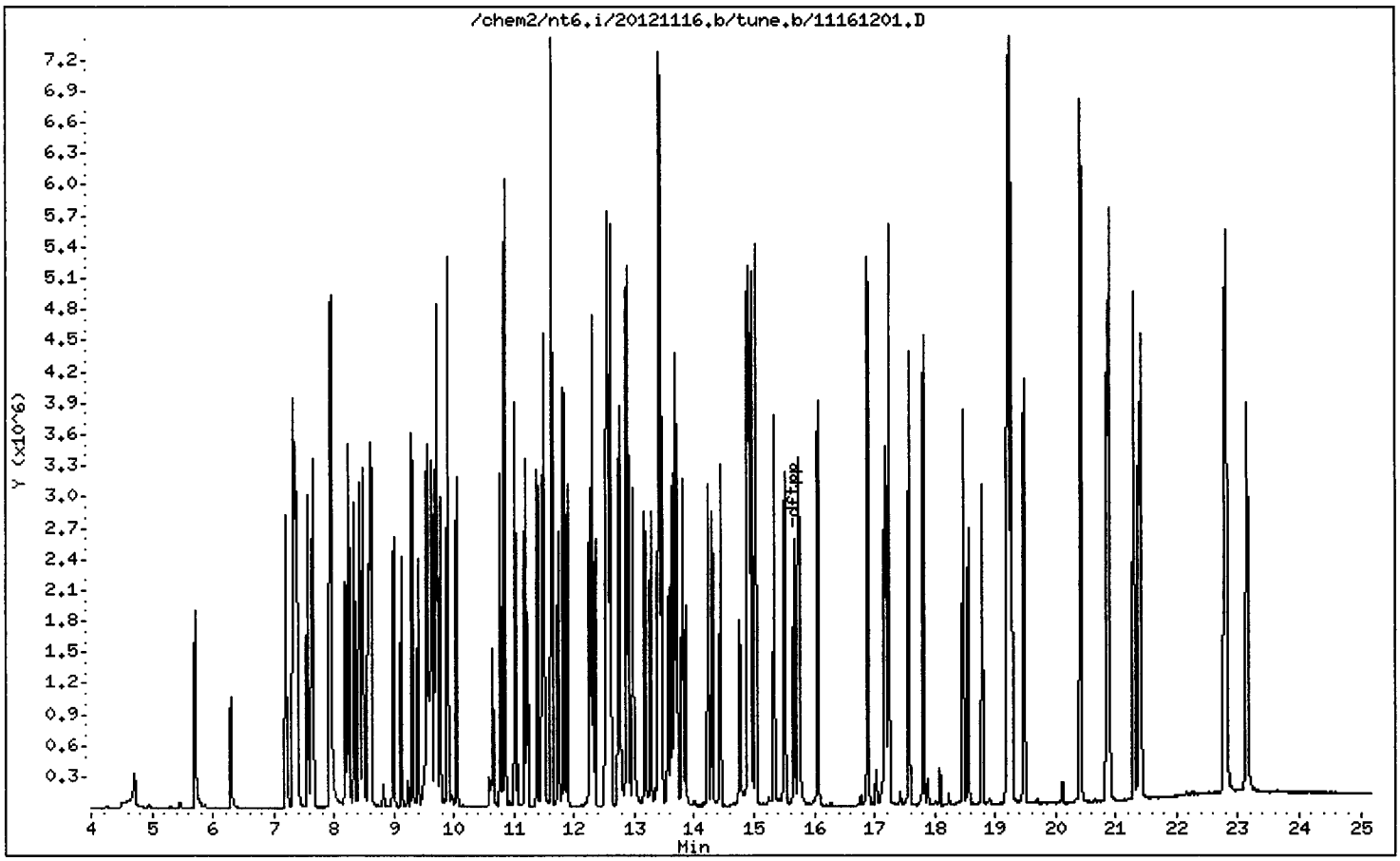
Instrument: nt6.i

Sample Info: DFTPP1116

Operator: JZ

Column phase: ZB-5msi

Column diameter: 0.32



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem2/nt6.i/20121116.b/ddt.b/11161201.D ARI ID: DDT1116
Method: /chem2/nt6.i/20121116.b/ddt.b/sw846ddt.m Misc: 12-
Analysis Date: 16-NOV-2012 09:31 Instrument: nt6.i

COMPOUND	RT	AREA
Pentachlorophenol	14.768	363618
Benzidine	17.166	1733030
4,4'-DDE	----	----
4,4'-DDD	18.085	117841
4,4'-DDT	18.555	894616

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

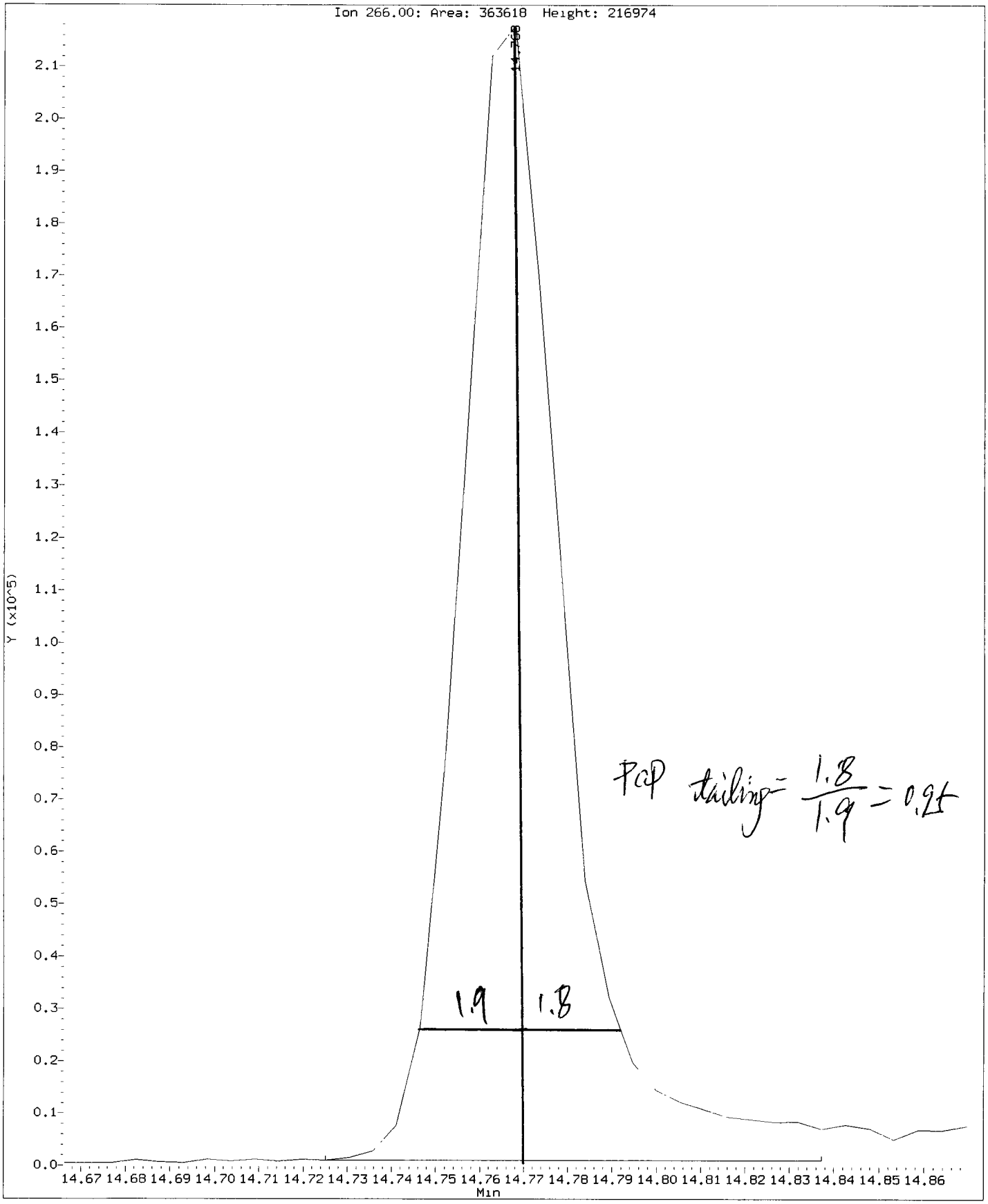
$$\text{DDT Percent Breakdown} = \frac{(0 + 117841) * 100}{(0 + 117841 + 894616)}$$

DDT Percent Breakdown = 11.6 %

11/16/12

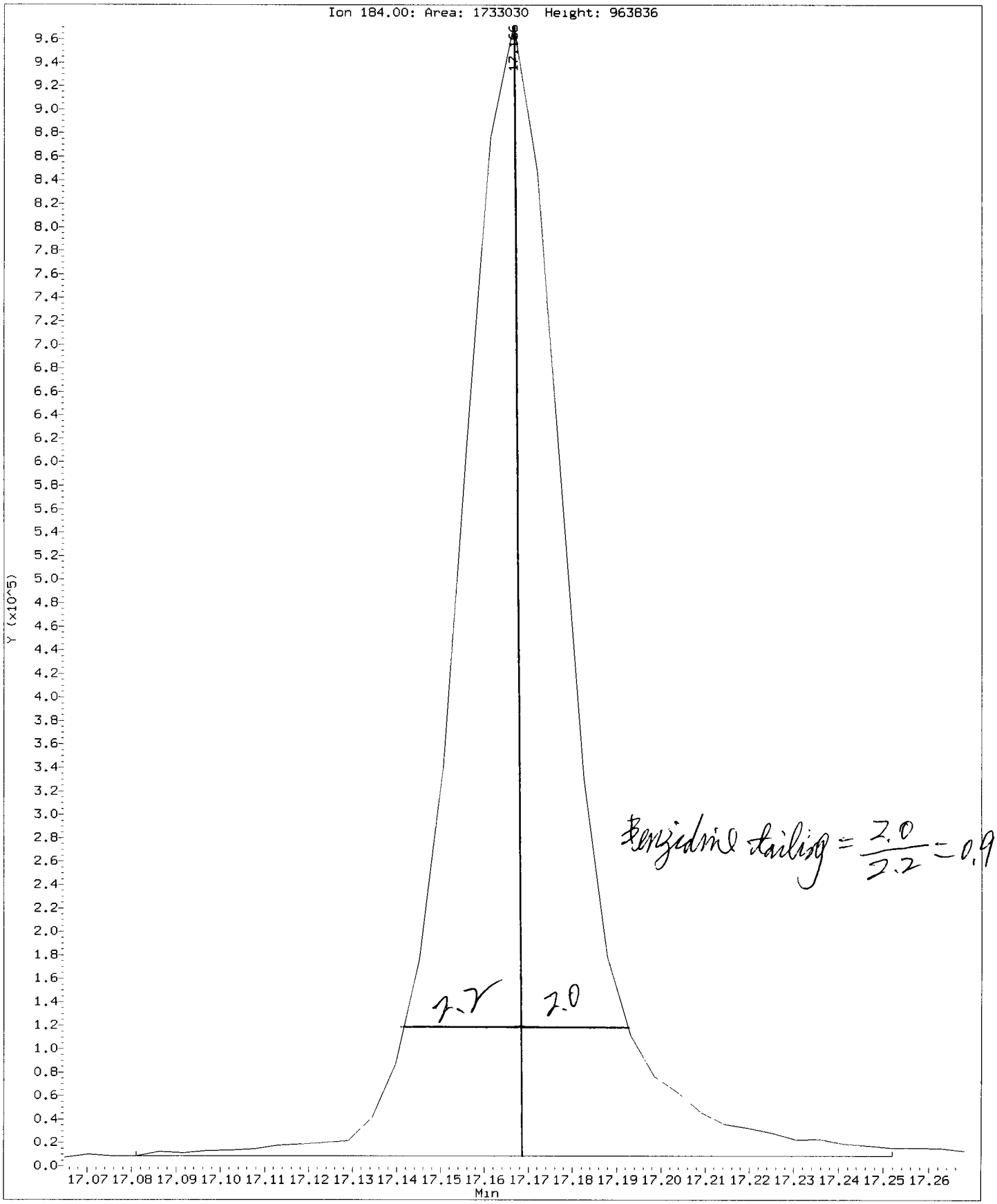
Data File: /chem2/nt6.i/20121116.b/ddt.b/11161201.D
Injection Date: 16-NOV-2012 09:31
Instrument: nt6.i
Client Sample ID: DDT1116

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem2/nt6.i/20121116.b/ddt.b/11161201.D
Injection Date: 16-NOV-2012 09:31
Instrument: nt6.i
Client Sample ID: DDT1116

Compound: Benzidine
CAS Number:



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121116.b/11161215.D
Lab Smp Id: VR80MBW1 Client Smp ID: VR80MBW1
Inj Date : 16-NOV-2012 17:35
Operator : JZ Inst ID: nt6.i
Smp Info : VR80MBW1,
Misc Info : 12-22456
Comment : 1ul Injection
Method : /chem2/nt6.i/20121116.b/SW846101912.m
Meth Date : 19-Nov-2012 12:07 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 20:20 Cal File: 10191208.D
Als bottle: 15 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLMBLCS.sub
Target Version: 3.50

11/19/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$	1	2-Fluorophenol	112	5.704	5.713	(0.748)	847328	25.6262	25.63
$	2	Phenol-d5	99	7.312	7.321	(0.959)	1126013	27.4350	27.44
	3	Phenol	94	Compound Not Detected.					
$	5	2-Chlorophenol-d4	132	7.355	7.358	(0.965)	961581	28.3203	28.32
	4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6	2-Chlorophenol	128	Compound Not Detected.					
	7	1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8	1,4-Dichlorobenzene-d4	152	7.622	7.625	(1.000)	496715	20.0000	
	9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10	1,2-Dichlorobenzene-d4	152	7.921	7.925	(1.039)	409429	16.8101	16.81
	12	1,2-Dichlorobenzene	146	Compound Not Detected.					
	11	Benzyl alcohol	108	Compound Not Detected.					
	14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
	13	2-Methylphenol	108	Compound Not Detected.					
	17	Hexachloroethane	117	Compound Not Detected.					
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	8.567	8.571	(0.885)	721902	18.8517	18.85
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	9.679	9.682	(1.000)	1813315	20.0000	
	28 Naphthalene	128	Compound Not Detected.					
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	141	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	11.495	11.498	(0.916)	1302541	18.5253	18.53
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	12.542	12.551	(1.000)	1059308	20.0000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	Compound Not Detected.					
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	Compound Not Detected.					
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	Compound Not Detected.					
	49 Fluorene	166	Compound Not Detected.					
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	13.851	13.854	(1.104)	293093	32.4419	32.44
	56 4-Bromophenyl-phenylether	248	13.845	14.234	(0.928)	16460	0.77097	0.7710
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	14.914	14.923	(1.000)	1750868	20.0000	
	60 Phenanthrene	178	Compound Not Detected.					
	61 Anthracene	178	Compound Not Detected.					
	62 Carbazole	167	Compound Not Detected.					
	63 Di-n-butylphthalate	149	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	64 Fluoranthene	202	Compound Not Detected.					
	65 Pyrene	202	Compound Not Detected.					
$	66 Terphenyl-d14	244	17.574	17.572	(0.914)	1539770	22.9876	22.99
	67 Butylbenzylphthalate	149	Compound Not Detected.					
	68 Benzo(a)anthracene	228	Compound Not Detected.					
*	69 Chrysene-d12	240	19.220	19.228	(1.000)	1819846	20.0000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	Compound Not Detected.					
	72 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
*	134 Di-n-octylphthalate-d4	153	20.406	20.409	(1.000)	2224125	20.0000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	Compound Not Detected.					
	75 Benzo(k)fluoranthene	252	Compound Not Detected.					
	76 Benzo(a)pyrene	252	Compound Not Detected.					
*	77 Perylene-d12	264	21.373	21.381	(1.000)	1791563	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	141	Compound Not Detected.					
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
	187 Total Benzofluoranthenes	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 11161215.D
Lab Smp Id: VR80MBW1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22456

Calibration Date: 16-NOV-2012
Calibration Time: 09:31
Client Smp ID: VR80MBW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	496715	-32.50
27 Naphthalene-d8	2597762	1298881	5195524	1813315	-30.20
42 Acenaphthene-d10	1503943	751972	3007886	1059308	-29.56
59 Phenanthrene-d10	2402003	1201002	4804006	1750868	-27.11
69 Chrysene-d12	2331938	1165969	4663876	1819846	-21.96
134 Di-n-octylphthala	2790605	1395302	5581210	2224125	-20.30
77 Perylene-d12	2485610	1242805	4971220	1791563	-27.92

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.63	7.13	8.13	7.62	-0.05
27 Naphthalene-d8	9.68	9.18	10.18	9.68	-0.04
42 Acenaphthene-d10	12.55	12.05	13.05	12.54	-0.07
59 Phenanthrene-d10	14.92	14.42	15.42	14.91	-0.06
69 Chrysene-d12	19.23	18.73	19.73	19.22	-0.05
134 Di-n-octylphthala	20.41	19.91	20.91	20.41	-0.02
77 Perylene-d12	21.38	20.88	21.88	21.37	-0.04

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

Analytical Resources, Inc.

RECOVERY REPORT

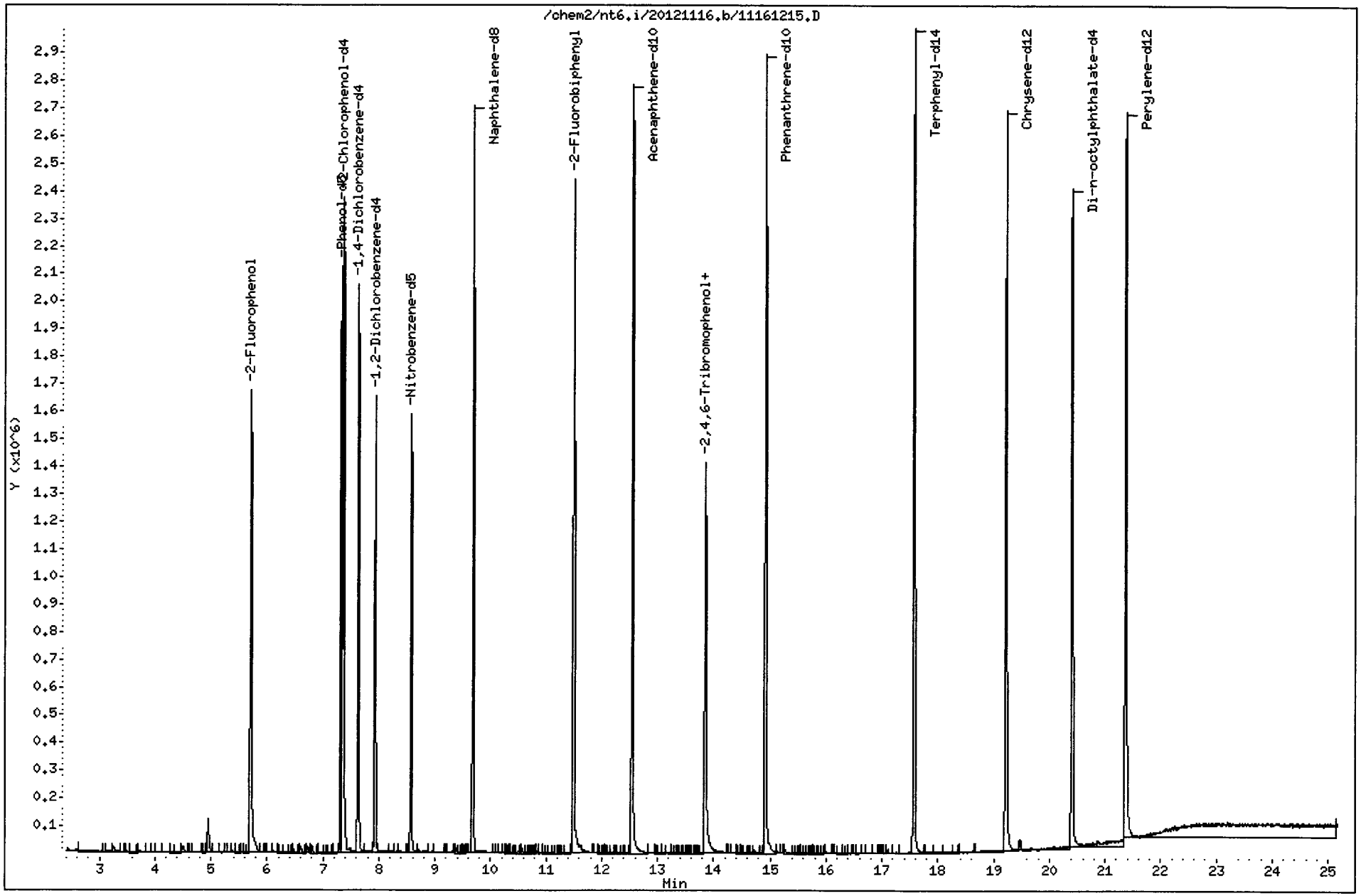
Client Name: Anchor QEA, LLC
Sample Matrix: LIQUID
Lab Smp Id: VR80MBW1
Level: LOW
Data Type: MS DATA
SpikeList File: LLLCS.spk
Sublist File: LLMBLCS.sub
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22456

Client SDG: VR80
Fraction: SV
Client Smp ID: VR80MBW1
Operator: JZ
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	37.50	25.63	68.34	46-100
$ 2 Phenol-d5	37.50	27.44	73.16	50-100
$ 5 2-Chlorophenol-d4	37.50	28.32	75.52	53-100
$ 10 1,2-Dichlorobenzen	25.00	16.81	67.24	38-100
$ 18 Nitrobenzene-d5	25.00	18.85	75.41	46-100
$ 36 2-Fluorobiphenyl	25.00	18.53	74.10	49-100
$ 55 2,4,6-Tribromophen	37.50	32.44	86.51	52-123
$ 66 Terphenyl-d14	25.00	22.99	91.95	53-119

Data File: /chem2/nt6.i/20121116.b/11161215.D
Date : 16-NOV-2012 17:35
Client ID: VR80MBW1
Sample Info: VR80MBW1,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 11161215.D

Lab ID: VR80MBW1, Method: SW846101912.m, Instrument: nt6.i, Date: 16-NOV-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121116.b/11161216.D
Lab Smp Id: VR80LCSW1 Client Smp ID: VR80LCSW1
Inj Date : 16-NOV-2012 18:10
Operator : JZ Inst ID: nt6.i
Smp Info : VR80LCSW1,
Misc Info : 12-22456
Comment : 1ul Injection
Method : /chem2/nt6.i/20121116.b/SW846101912.m
Meth Date : 19-Nov-2012 12:07 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 20:20 Cal File: 10191208.D
Als bottle: 16 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLMBLCS.sub
Target Version: 3.50

JZ 11/19/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$ 1	2-Fluorophenol	112	5.705	5.713	(0.748)	829203	24.3433	24.34
$ 2	Phenol-d5	99	7.313	7.321	(0.959)	1173072	27.7442	27.74
3	Phenol	94	7.329	7.337	(0.961)	826709	18.6650	18.67
$ 5	2-Chlorophenol-d4	132	7.356	7.358	(0.965)	964592	27.5766	27.58
4	Bis(2-Chloroethyl)ether	93	7.313	7.316	(0.959)	637943	18.1964	18.20
6	2-Chlorophenol	128	7.377	7.385	(0.968)	665955	18.1551	18.16
7	1,3-Dichlorobenzene	146	7.559	7.561	(0.992)	581552	14.1498	14.15
* 8	1,4-Dichlorobenzene-d4	152	7.623	7.625	(1.000)	511708	20.0000	
9	1,4-Dichlorobenzene	146	7.649	7.652	(1.004)	596044	14.7042	14.70
$ 10	1,2-Dichlorobenzene-d4	152	7.922	7.925	(1.039)	402247	16.0313	16.03
12	1,2-Dichlorobenzene	146	7.943	7.946	(1.042)	571714	14.8006	14.80
11	Benzyl alcohol	108	7.954	7.962	(1.043)	473123	16.0685	16.07
14	2,2'-oxybis(1-Chloropropane)	45	8.189	8.192	(1.074)	923811	18.7900	18.79
13	2-Methylphenol	108	8.237	8.245	(1.081)	625820	18.6993	18.70
17	Hexachloroethane	117	8.429	8.437	(1.106)	225325	13.9280	13.93
16	N-Nitroso-di-n-propylamine	70	8.413	8.421	(1.104)	518661	20.9043	20.90

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)	
15	4-Methylphenol	108	8.488	8.485	(1.114)	1363328	39.5162	39.52	
$ 18	Nitrobenzene-d5	82	8.568	8.571	(0.885)	766452	19.3577	19.36	
19	Nitrobenzene	77	8.600	8.603	(0.888)	726901	18.7951	18.80	
20	Isophorone	82	8.996	8.993	(0.929)	1435776	24.0100	24.01	
21	2-Nitrophenol	139	9.118	9.121	(0.942)	379120	19.7106	19.71	
22	2,4-Dimethylphenol	107	9.295	9.297	(0.960)	1768891	50.7672	50.77	
23	Bis(2-Chloroethoxy)methane	93	9.402	9.399	(0.971)	787795	18.4439	18.44	
24	Benzoic acid	105	9.674	9.618	(0.999)	3019524	125.666	125.7	
25	2,4-Dichlorophenol	162	9.546	9.549	(0.986)	1630674	56.1922	56.19	
26	1,2,4-Trichlorobenzene	180	9.631	9.634	(0.994)	512573	15.4731	15.47	
* 27	Naphthalene-d8	136	9.685	9.682	(1.000)	1874895	20.0000		
28	Naphthalene	128	9.711	9.714	(1.003)	1821881	16.4805	16.48	
29	4-Chloroaniline	127	9.893	9.890	(1.022)	2356283	87.4577	87.46	
30	Hexachlorobutadiene	225	10.043	10.045	(1.037)	286769	14.2864	14.29	
31	4-Chloro-3-methylphenol	107	10.764	10.767	(1.111)	1836950	65.0853	65.09	
32	2-Methylnaphthalene	141	10.839	10.841	(1.119)	1001125	15.8561	15.86	
33	Hexachlorocyclopentadiene	237	11.223	11.226	(0.894)	729321	34.6162	34.62	Q(NTC)
34	2,4,6-Trichlorophenol	196	11.389	11.386	(0.908)	1285719	59.5833	59.58	
35	2,4,5-Trichlorophenol	196	11.464	11.472	(0.914)	1375251	60.7153	60.72	
$ 36	2-Fluorobiphenyl	172	11.496	11.498	(0.916)	1523089	20.4040	20.40	
37	2-Chloronaphthalene	162	11.619	11.616	(0.926)	1219549	19.4315	19.43	
38	2-Nitroaniline	65	11.891	11.883	(0.948)	1449855	61.0255	61.03	
39	Dimethylphthalate	163	12.260	12.257	(0.977)	1591588	23.2247	23.22	
40	Acenaphthylene	152	12.297	12.294	(0.980)	2138483	19.4415	19.44	
41	2,6-Dinitrotoluene	165	12.350	12.342	(0.984)	1185737	74.1903	74.19	
* 42	Acenaphthene-d10	164	12.548	12.551	(1.000)	1124622	20.0000		
43	3-Nitroaniline	138	12.580	12.572	(1.003)	1368867	66.6682	66.67	
44	Acenaphthene	153	12.601	12.599	(1.004)	1304209	18.3309	18.33	
45	2,4-Dinitrophenol	184	12.730	12.727	(1.014)	1009780	112.772	112.8	Q(NTC)
46	Dibenzofuran	168	12.863	12.866	(1.025)	1902509	18.0853	18.09	
47	4-Nitrophenol	109	12.970	12.978	(1.034)	623979	74.3896	74.39	
48	2,4-Dinitrotoluene	165	12.981	12.968	(1.034)	1541710	74.9654	74.97	
50	Diethylphthalate	149	13.419	13.411	(1.069)	1638110	23.1390	23.14	
49	Fluorene	166	13.419	13.422	(1.069)	1492365	19.3197	19.32	
51	4-Chlorophenyl-phenylether	204	13.456	13.454	(1.072)	750878	20.6141	20.61	
52	4-Nitroaniline	138	13.590	13.571	(1.083)	1326529	69.6783	69.68	
53	4,6-Dinitro-2-methylphenol	198	13.638	13.630	(0.914)	1574126	125.019	125.0	
54	N-Nitrosodiphenylamine	169	13.670	13.673	(0.916)	1081555	18.4636	18.46	
$ 55	2,4,6-Tribromophenol	330	13.852	13.854	(1.104)	383896	40.0249	40.02	
56	4-Bromophenyl-phenylether	248	14.231	14.234	(0.954)	447448	18.9872	18.99	
57	Hexachlorobenzene	284	14.439	14.442	(0.968)	468555	19.2473	19.25	
58	Pentachlorophenol	266	14.765	14.768	(0.990)	819092	58.9195	58.92	
* 59	Phenanthrene-d10	188	14.920	14.923	(1.000)	1932614	20.0000		
60	Phenanthrene	178	14.957	14.955	(1.002)	2225088	19.4964	19.50	
61	Anthracene	178	15.027	15.030	(1.007)	2180866	18.6177	18.62	
62	Carbazole	167	15.331	15.334	(1.028)	2104680	22.3601	22.36	
63	Di-n-butylphthalate	149	16.058	16.061	(1.076)	2602311	22.2985	22.30	

11/19/12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	64 Fluoranthene	202	16.886	16.889	(1.132)	2493130	20.8381	20.84
	65 Pyrene	202	17.238	17.241	(0.897)	2539565	18.5798	18.58
$	66 Terphenyl-d14	244	17.570	17.572	(0.914)	1677026	23.3863	23.39
	67 Butylbenzylphthalate	149	18.467	18.470	(0.961)	1143865	21.2248	21.22
	68 Benzo(a)anthracene	228	19.199	19.207	(0.999)	2310438	19.9583	19.96
*	69 Chrysene-d12	240	19.220	19.228	(1.000)	1948280	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.236	19.228	(1.001)	2146723	65.8835	65.88
	71 Chrysene	228	19.263	19.271	(1.002)	2222373	19.7130	19.71
	72 bis(2-Ethylhexyl)phthalate	149	19.477	19.480	(0.954)	1587380	20.7559	20.76
*	134 Di-n-octylphthalate-d4	153	20.406	20.409	(1.000)	2424873	20.0000	
	73 Di-n-octylphthalate	149	20.417	20.420	(1.001)	2599295	20.4355	20.44
	74 Benzo(b)fluoranthene	252	20.850	20.858	(0.976)	2326825	19.2383	19.24
	75 Benzo(k)fluoranthene	252	20.887	20.895	(0.977)	2438914	19.7382	19.74
	76 Benzo(a)pyrene	252	21.293	21.301	(0.996)	1991261	17.6409	17.64
*	77 Perylene-d12	264	21.373	21.381	(1.000)	2042796	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	22.773	22.781	(1.065)	2491571	16.0089	16.01
	79 Dibenzo(a,h)anthracene	278	22.800	22.813	(1.067)	2151948	17.0823	17.08
	80 Benzo(g,h,i)perylene	276	23.136	23.150	(1.082)	2199943	16.1333	16.13
	90 N-Nitrosodimethylamine	74	2.788	2.785	(0.366)	1106206	47.8996	47.90
	91 Aniline	93	7.190	7.198	(0.943)	613792	10.0576	10.06
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	141	11.010	11.012	(1.137)	1015502	22.2317	22.23
	111 Azobenzene (1,2-DP-Hydrazine)	77	13.707	13.705	(1.092)	1606986	22.0355	22.04
	187 Total Benzofluoranthenes	252	20.887	20.895	(0.977)	4518743	38.5137	38.51

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 11161216.D
Lab Smp Id: VR80LCSW1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22456

Calibration Date: 16-NOV-2012
Calibration Time: 09:31
Client Smp ID: VR80LCSW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	511708	-30.47
27 Naphthalene-d8	2597762	1298881	5195524	1874895	-27.83
42 Acenaphthene-d10	1503943	751972	3007886	1124622	-25.22
59 Phenanthrene-d10	2402003	1201002	4804006	1932614	-19.54
69 Chrysene-d12	2331938	1165969	4663876	1948280	-16.45
134 Di-n-octylphthala	2790605	1395302	5581210	2424873	-13.11
77 Perylene-d12	2485610	1242805	4971220	2042796	-17.82

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.63	7.13	8.13	7.62	-0.04
27 Naphthalene-d8	9.68	9.18	10.18	9.68	0.03
42 Acenaphthene-d10	12.55	12.05	13.05	12.55	-0.02
59 Phenanthrene-d10	14.92	14.42	15.42	14.92	-0.02
69 Chrysene-d12	19.23	18.73	19.73	19.22	-0.04
134 Di-n-octylphthala	20.41	19.91	20.91	20.41	-0.01
77 Perylene-d12	21.38	20.88	21.88	21.37	-0.04

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Anchor QEA, LLC
Sample Matrix: LIQUID
Lab Smp Id: VR80LCSW1
Level: LOW
Data Type: MS DATA
SpikeList File: LLLCS.spk
Sublist File: LLMBLCS.sub
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22456

Client SDG: VR80
Fraction: SV
Client Smp ID: VR80LCSW1
Operator: JZ
SampleType: LCS
Quant Type: ISTD

SPIKE	COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
3	Phenol	25.00	18.67	74.66	50-100
4	Bis(2-Chloroethyl)	25.00	18.20	72.79	52-100
6	2-Chlorophenol	25.00	18.16	72.62	56-100
7	1,3-Dichlorobenzen	25.00	14.15	56.60	23-100
9	1,4-Dichlorobenzen	25.00	14.70	58.82	25-100
11	Benzyl alcohol	25.00	16.07	64.27	19-100
12	1,2-Dichlorobenzen	25.00	14.80	59.20	30-100
13	2-Methylphenol	25.00	18.70	74.80	52-100
14	2,2'-oxybis(1-Chlo	25.00	18.79	75.16	32-111
15	4-Methylphenol	50.00	39.52	79.03	53-102
16	N-Nitroso-di-n-pro	25.00	20.90	83.62	43-104
17	Hexachloroethane	25.00	13.93	55.71	12-100
19	Nitrobenzene	25.00	18.80	75.18	33-125
20	Isophorone	25.00	24.01	96.04	57-115
21	2-Nitrophenol	25.00	19.71	78.84	56-102
22	2,4-Dimethylphenol	75.00	50.77	67.69	29-100
23	Bis(2-Chloroethoxy	25.00	18.44	73.78	54-101
24	Benzoic acid	137.5	125.7	91.39	10-131
25	2,4-Dichlorophenol	75.00	56.19	74.92	56-104
26	1,2,4-Trichloroben	25.00	15.47	61.89	27-100
28	Naphthalene	25.00	16.48	65.92	45-100
29	4-Chloroaniline	75.00	87.46	116.61	10-139
30	Hexachlorobutadien	25.00	14.29	57.15	10-100
31	4-Chloro-3-methylp	75.00	65.09	86.78	53-109
32	2-Methylnaphthalen	25.00	15.86	63.42	46-100
33	Hexachlorocyclopen	75.00	34.62	46.15	10-100
34	2,4,6-Trichlorophe	75.00	59.58	79.44	58-108
35	2,4,5-Trichlorophe	75.00	60.72	80.95	58-107
37	2-Chloronaphthalen	25.00	19.43	77.73	56-104
38	2-Nitroaniline	75.00	61.03	81.37	50-107
39	Dimethylphthalate	25.00	23.22	92.90	58-107
40	Acenaphthylene	25.00	19.44	77.77	57-100
41	2,6-Dinitrotoluene	75.00	74.19	98.92	58-112

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
43 3-Nitroaniline	75.00	66.67	88.89	21-150
44 Acenaphthene	25.00	18.33	73.32	51-100
45 2,4-Dinitrophenol	137.5	112.8	82.02	12-169
46 Dibenzofuran	25.00	18.09	72.34	57-100
47 4-Nitrophenol	75.00	74.39	99.19	35-119
48 2,4-Dinitrotoluene	75.00	74.97	99.95	58-117
49 Fluorene	25.00	19.32	77.28	56-104
50 Diethylphthalate	25.00	23.14	92.56	52-111
51 4-Chlorophenyl-phe	25.00	20.61	82.46	55-104
52 4-Nitroaniline	75.00	69.68	92.90	49-112
53 4,6-Dinitro-2-meth	137.5	125.0	90.92	13-139
54 N-Nitrosodiphenyla	25.00	18.46	73.85	60-136
56 4-Bromophenyl-phen	25.00	18.99	75.95	50-103
57 Hexachlorobenzene	25.00	19.25	76.99	54-106
58 Pentachlorophenol	75.00	58.92	78.56	46-114
60 Phenanthrene	25.00	19.50	77.99	56-102
61 Anthracene	25.00	18.62	74.47	56-101
62 Carbazole	25.00	22.36	89.44	60-108
63 Di-n-butylphthalat	25.00	22.30	89.19	56-112
64 Fluoranthene	25.00	20.84	83.35	57-110
65 Pyrene	25.00	18.58	74.32	48-119
67 Butylbenzylphthala	25.00	21.22	84.90	51-114
68 Benzo(a)anthracene	25.00	19.96	79.83	55-105
70 3,3'-Dichlorobenzi	75.00	65.88	87.84	10-128
71 Chrysene	25.00	19.71	78.85	55-104
72 bis(2-Ethylhexyl)p	25.00	20.76	83.02	28-164
73 Di-n-octylphthalat	25.00	20.44	81.74	57-107
74 Benzo(b)fluoranthe	25.00	19.24	76.95	53-112
75 Benzo(k)fluoranthe	25.00	19.74	78.95	50-116
76 Benzo(a)pyrene	25.00	17.64	70.56	45-103
78 Indeno(1,2,3-cd)py	25.00	16.01	64.04	35-118
79 Dibenzo(a,h)anthra	25.00	17.08	68.33	42-119
80 Benzo(g,h,i)peryle	25.00	16.13	64.53	39-123
91 Aniline	75.00	10.06	13.41	10-100
111 Azobenzene (1,2-DP	25.00	22.04	88.14	57-109
90 N-Nitrosodimethyla	75.00	47.90	63.87	49-100
105 1-methylnaphthalen	25.00	22.23	88.93	46-100
144 alpha-Terpineol	25.00	0.000	NC *	30-160
187 Total Benzofluoran	50.00	38.51	77.03	30-160

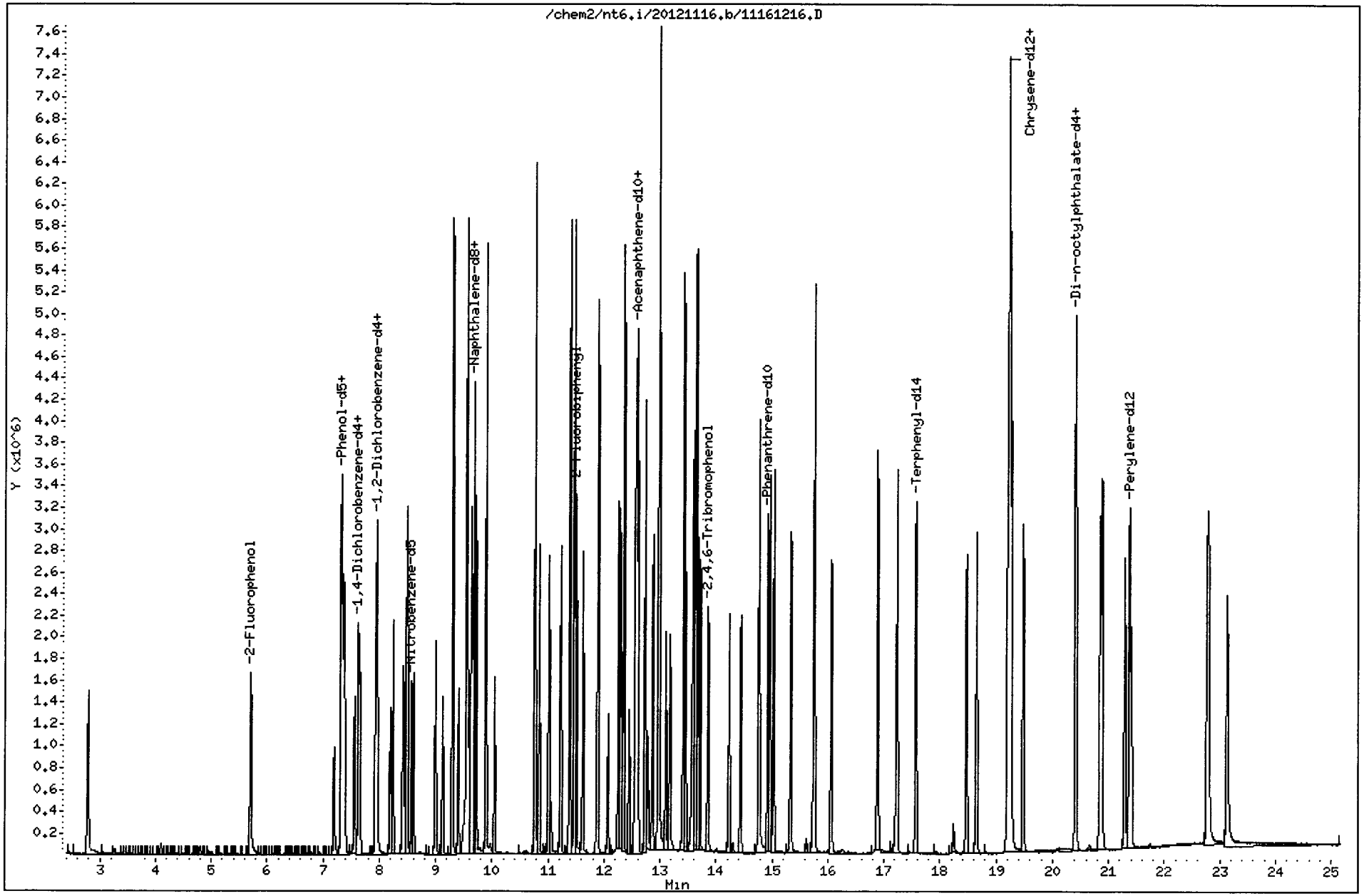
SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	37.50	24.34	64.92	46-100

11/19/12

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 2 Phenol-d5	37.50	27.74	73.98	50-100
$ 5 2-Chlorophenol-d4	37.50	27.58	73.54	53-100
$ 10 1,2-Dichlorobenzen	25.00	16.03	64.13	38-100
$ 18 Nitrobenzene-d5	25.00	19.36	77.43	46-100
$ 36 2-Fluorobiphenyl	25.00	20.40	81.62	49-100
$ 55 2,4,6-Tribromophen	37.50	40.02	106.73	52-123
$ 66 Terphenyl-d14	25.00	23.39	93.55	53-119

Data File: /chem2/nt6.i/20121116.b/11161216.D
Date : 16-NOV-2012 18:10
Client ID: VR80LCSW1
Sample Info: VR80LCSW1,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 11161216.D

Lab ID: VR80LCSW1, Method: SW846101912.m, Instrument: nt6.i, Date: 16-NOV-201

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121116.b/11161217.D
Lab Smp Id: VR80LCSDW1 Client Smp ID: VR80LCSDW1
Inj Date : 16-NOV-2012 18:44
Operator : JZ Inst ID: nt6.i
Smp Info : VR80LCSDW1,
Misc Info : 12-22456
Comment : 1ul Injection
Method : /chem2/nt6.i/20121116.b/SW846101912.m
Meth Date : 19-Nov-2012 12:07 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 20:20 Cal File: 10191208.D
Als bottle: 17 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LLMBLCS.sub
Target Version: 3.50

11/19/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	5.704	5.713	(0.748)	968819	26.8813	26.88
$ 2	Phenol-d5	99	7.318	7.321	(0.960)	1331813	29.7701	29.77
3	Phenol	94	7.334	7.337	(0.962)	951506	20.3038	20.30
$ 5	2-Chlorophenol-d4	132	7.360	7.358	(0.966)	1087257	29.3777	29.38
4	Bis(2-Chloroethyl)ether	93	7.312	7.316	(0.959)	703590	18.9676	18.97
6	2-Chlorophenol	128	7.382	7.385	(0.968)	747902	19.2702	19.27
7	1,3-Dichlorobenzene	146	7.558	7.561	(0.992)	674771	15.5170	15.52
* 8	1,4-Dichlorobenzene-d4	152	7.622	7.625	(1.000)	541418	20.0000	
9	1,4-Dichlorobenzene	146	7.649	7.652	(1.004)	689972	16.0873	16.09
$ 10	1,2-Dichlorobenzene-d4	152	7.921	7.925	(1.039)	452735	17.0533	17.05
12	1,2-Dichlorobenzene	146	7.948	7.946	(1.043)	667611	16.3348	16.33
11	Benzyl alcohol	108	7.953	7.962	(1.043)	521025	16.7243	16.72
14	2,2'-oxybis(1-Chloropropane)	45	8.194	8.192	(1.075)	1038801	19.9694	19.97
13	2-Methylphenol	108	8.242	8.245	(1.081)	704181	19.8861	19.89
17	Hexachloroethane	117	8.434	8.437	(1.107)	258464	15.0997	15.10
16	N-Nitroso-di-n-propylamine	70	8.418	8.421	(1.104)	559292	21.3049	21.30

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	15 4-Methylphenol	108	8.488	8.485	(1.114)	1505532	41.2434	41.24
$	18 Nitrobenzene-d5	82	8.573	8.571	(0.885)	833873	20.1534	20.15
	19 Nitrobenzene	77	8.600	8.603	(0.888)	802936	19.8669	19.87
	20 Isophorone	82	8.995	8.993	(0.929)	1514562	24.2366	24.24
	21 2-Nitrophenol	139	9.123	9.121	(0.942)	424846	21.1365	21.14
	22 2,4-Dimethylphenol	107	9.300	9.297	(0.960)	1970887	54.1282	54.13
	23 Bis(2-Chloroethoxy)methane	93	9.401	9.399	(0.971)	868620	19.4603	19.46
	24 Benzoic acid	105	9.690	9.618	(1.001)	3319993	132.220	132.2
	25 2,4-Dichlorophenol	162	9.545	9.549	(0.986)	1830044	60.3461	60.35
	26 1,2,4-Trichlorobenzene	180	9.631	9.634	(0.994)	580623	16.7723	16.77
*	27 Naphthalene-d8	136	9.684	9.682	(1.000)	1959285	20.0000	
	28 Naphthalene	128	9.716	9.714	(1.003)	1998057	17.2957	17.30
	29 4-Chloroaniline	127	9.893	9.890	(1.022)	2675079	101.856	101.9
	30 Hexachlorobutadiene	225	10.042	10.045	(1.037)	331279	15.7929	15.79
	31 4-Chloro-3-methylphenol	107	10.763	10.767	(1.111)	1983390	67.2470	67.25
	32 2-Methylnaphthalene	141	10.843	10.841	(1.120)	1106668	16.7727	16.77
	33 Hexachlorocyclopentadiene	237	11.223	11.226	(0.894)	832832	37.4934	37.49
	34 2,4,6-Trichlorophenol	196	11.388	11.386	(0.907)	1423871	62.5874	62.59
	35 2,4,5-Trichlorophenol	196	11.469	11.472	(0.914)	1539300	64.4581	64.46
$	36 2-Fluorobiphenyl	172	11.495	11.498	(0.916)	1649332	20.9573	20.96
	37 2-Chloronaphthalene	162	11.618	11.616	(0.926)	1334316	20.1653	20.17
	38 2-Nitroaniline	65	11.891	11.883	(0.947)	1528458	61.0208	61.02
	39 Dimethylphthalate	163	12.259	12.257	(0.977)	1673513	23.1625	23.16
	40 Acenaphthylene	152	12.297	12.294	(0.980)	2304150	19.8689	19.87
	41 2,6-Dinitrotoluene	165	12.350	12.342	(0.984)	1255064	74.4839	74.48
*	42 Acenaphthene-d10	164	12.553	12.551	(1.000)	1185684	20.0000	
	43 3-Nitroaniline	138	12.580	12.572	(1.002)	1455919	67.2562	67.26
	44 Acenaphthene	153	12.601	12.599	(1.004)	1418396	18.9092	18.91
	45 2,4-Dinitrophenol	184	12.735	12.727	(1.014)	1154034	120.373	120.4
	46 Dibenzofuran	168	12.863	12.866	(1.025)	2051930	18.5012	18.50
	47 4-Nitrophenol	109	12.970	12.978	(1.033)	636088	71.9278	71.93
	48 2,4-Dinitrotoluene	165	12.980	12.968	(1.034)	1618812	74.6607	74.66
	50 Diethylphthalate	149	13.418	13.411	(1.069)	1725479	23.1179	23.12
	49 Fluorene	166	13.418	13.422	(1.069)	1617687	19.8636	19.86
	51 4-Chlorophenyl-phenylether	204	13.456	13.454	(1.072)	831863	21.6614	21.66
	52 4-Nitroaniline	138	13.595	13.571	(1.083)	1429704	71.2303	71.23
	53 4,6-Dinitro-2-methylphenol	198	13.637	13.630	(0.914)	1734091	133.093	133.1
	54 N-Nitrosodiphenylamine	169	13.675	13.673	(0.917)	1165256	19.2238	19.22
$	55 2,4,6-Tribromophenol	330	13.851	13.854	(1.103)	412491	40.7914	40.79
	56 4-Bromophenyl-phenylether	248	14.230	14.234	(0.954)	492764	20.2071	20.21
	57 Hexachlorobenzene	284	14.439	14.442	(0.968)	517276	20.5343	20.53
	58 Pentachlorophenol	266	14.765	14.768	(0.990)	897477	62.3875	62.39
*	59 Phenanthrene-d10	188	14.920	14.923	(1.000)	1999848	20.0000	
	60 Phenanthrene	178	14.957	14.955	(1.002)	2396055	20.2887	20.29
	61 Anthracene	178	15.026	15.030	(1.007)	2359940	19.4691	19.47
	62 Carbazole	167	15.331	15.334	(1.028)	2274060	23.3473	23.35
	63 Di-n-butylphthalate	149	16.063	16.061	(1.077)	2809541	23.2649	23.26

Q(1TC)

Q(1TC)

11/19/12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	64 Fluoranthene	202	16.885	16.889	(1.132)	2749669	22.2097	22.21
	65 Pyrene	202	17.238	17.241	(0.897)	2793410	19.5079	19.51
$	66 Terphenyl-d14	244	17.575	17.572	(0.914)	1818323	24.2040	24.20
	67 Butylbenzylphthalate	149	18.467	18.470	(0.961)	1255548	22.2380	22.24
	68 Benzo(a)anthracene	228	19.199	19.207	(0.999)	2594929	21.3968	21.40
*	69 Chrysene-d12	240	19.225	19.228	(1.000)	2041068	20.0000	
	70 3,3'-Dichlorobenzidine	252	19.236	19.228	(1.001)	2329530	68.2437	68.24
	71 Chrysene	228	19.268	19.271	(1.002)	2470692	20.9193	20.92
	72 bis(2-Ethylhexyl)phthalate	149	19.476	19.480	(0.954)	1721663	21.1009	21.10
*	134 Di-n-octylphthalate-d4	153	20.411	20.409	(1.000)	2587008	20.0000	
	73 Di-n-octylphthalate	149	20.417	20.420	(1.000)	2884674	21.2578	21.26
	74 Benzo(b)fluoranthene	252	20.855	20.858	(0.976)	2527902	19.1642	19.16
	75 Benzo(k)fluoranthene	252	20.887	20.895	(0.977)	2899814	21.5183	21.52
	76 Benzo(a)pyrene	252	21.298	21.301	(0.996)	2284439	18.5566	18.56
*	77 Perylene-d12	264	21.378	21.381	(1.000)	2227912	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	22.772	22.781	(1.065)	2760336	16.2621	16.26
	79 Dibenzo(a,h)anthracene	278	22.799	22.813	(1.066)	2397471	17.4500	17.45
	80 Benzo(g,h,i)perylene	276	23.136	23.150	(1.082)	2392576	16.0880	16.09
	90 N-Nitrosodimethylamine	74	2.793	2.785	(0.366)	1311170	53.6592	53.66
	91 Aniline	93	7.195	7.198	(0.944)	762572	11.8098	11.81
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	141	11.014	11.012	(1.137)	1113964	23.3368	23.34
	111 Azobenzene (1,2-DP-Hydrazine)	77	13.712	13.705	(1.092)	1716942	22.3307	22.33
	187 Total Benzofluoranthenes	252	20.887	20.895	(0.977)	5127912	40.0742	40.07

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 11161217.D
Lab Smp Id: VR80LCSDW1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22456

Calibration Date: 16-NOV-2012
Calibration Time: 09:31
Client Smp ID: VR80LCSDW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	541418	-26.43
27 Naphthalene-d8	2597762	1298881	5195524	1959285	-24.58
42 Acenaphthene-d10	1503943	751972	3007886	1185684	-21.16
59 Phenanthrene-d10	2402003	1201002	4804006	1999848	-16.74
69 Chrysene-d12	2331938	1165969	4663876	2041068	-12.47
134 Di-n-octylphthala	2790605	1395302	5581210	2587008	-7.30
77 Perylene-d12	2485610	1242805	4971220	2227912	-10.37

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.63	7.13	8.13	7.62	-0.04
27 Naphthalene-d8	9.68	9.18	10.18	9.68	0.02
42 Acenaphthene-d10	12.55	12.05	13.05	12.55	0.02
59 Phenanthrene-d10	14.92	14.42	15.42	14.92	-0.02
69 Chrysene-d12	19.23	18.73	19.73	19.23	-0.02
134 Di-n-octylphthala	20.41	19.91	20.91	20.41	0.01
77 Perylene-d12	21.38	20.88	21.88	21.38	-0.01

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Anchor QEA, LLC
Sample Matrix: LIQUID
Lab Smp Id: VR80LCSDW1
Level: LOW
Data Type: MS DATA
SpikeList File: LLLCS.spk
Sublist File: LLMBLCS.sub
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22456

Client SDG: VR80
Fraction: SV
Client Smp ID: VR80LCSDW1
Operator: JZ
SampleType: LCSD
Quant Type: ISTD

	SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
3	Phenol	25.00	20.30	81.22	50-100
4	Bis(2-Chloroethyl)	25.00	18.97	75.87	52-100
6	2-Chlorophenol	25.00	19.27	77.08	56-100
7	1,3-Dichlorobenzen	25.00	15.52	62.07	23-100
9	1,4-Dichlorobenzen	25.00	16.09	64.35	25-100
11	Benzyl alcohol	25.00	16.72	66.90	19-100
12	1,2-Dichlorobenzen	25.00	16.33	65.34	30-100
13	2-Methylphenol	25.00	19.89	79.54	52-100
14	2,2'-oxybis(1-Chlo	25.00	19.97	79.88	32-111
15	4-Methylphenol	50.00	41.24	82.49	53-102
16	N-Nitroso-di-n-pro	25.00	21.30	85.22	43-104
17	Hexachloroethane	25.00	15.10	60.40	12-100
19	Nitrobenzene	25.00	19.87	79.47	33-125
20	Isophorone	25.00	24.24	96.95	57-115
21	2-Nitrophenol	25.00	21.14	84.55	56-102
22	2,4-Dimethylphenol	75.00	54.13	72.17	29-100
23	Bis(2-Chloroethoxy	25.00	19.46	77.84	54-101
24	Benzoic acid	137.5	132.2	96.16	10-131
25	2,4-Dichlorophenol	75.00	60.35	80.46	56-104
26	1,2,4-Trichloroben	25.00	16.77	67.09	27-100
28	Naphthalene	25.00	17.30	69.18	45-100
29	4-Chloroaniline	75.00	101.9	135.81	10-139
30	Hexachlorobutadien	25.00	15.79	63.17	10-100
31	4-Chloro-3-methylp	75.00	67.25	89.66	53-109
32	2-Methylnaphthalen	25.00	16.77	67.09	46-100
33	Hexachlorocyclopen	75.00	37.49	49.99	10-100
34	2,4,6-Trichlorophe	75.00	62.59	83.45	58-108
35	2,4,5-Trichlorophe	75.00	64.46	85.94	58-107
37	2-Chloronaphthalen	25.00	20.17	80.66	56-104
38	2-Nitroaniline	75.00	61.02	81.36	50-107
39	Dimethylphthalate	25.00	23.16	92.65	58-107
40	Acenaphthylene	25.00	19.87	79.48	57-100
41	2,6-Dinitrotoluene	75.00	74.48	99.31	58-112

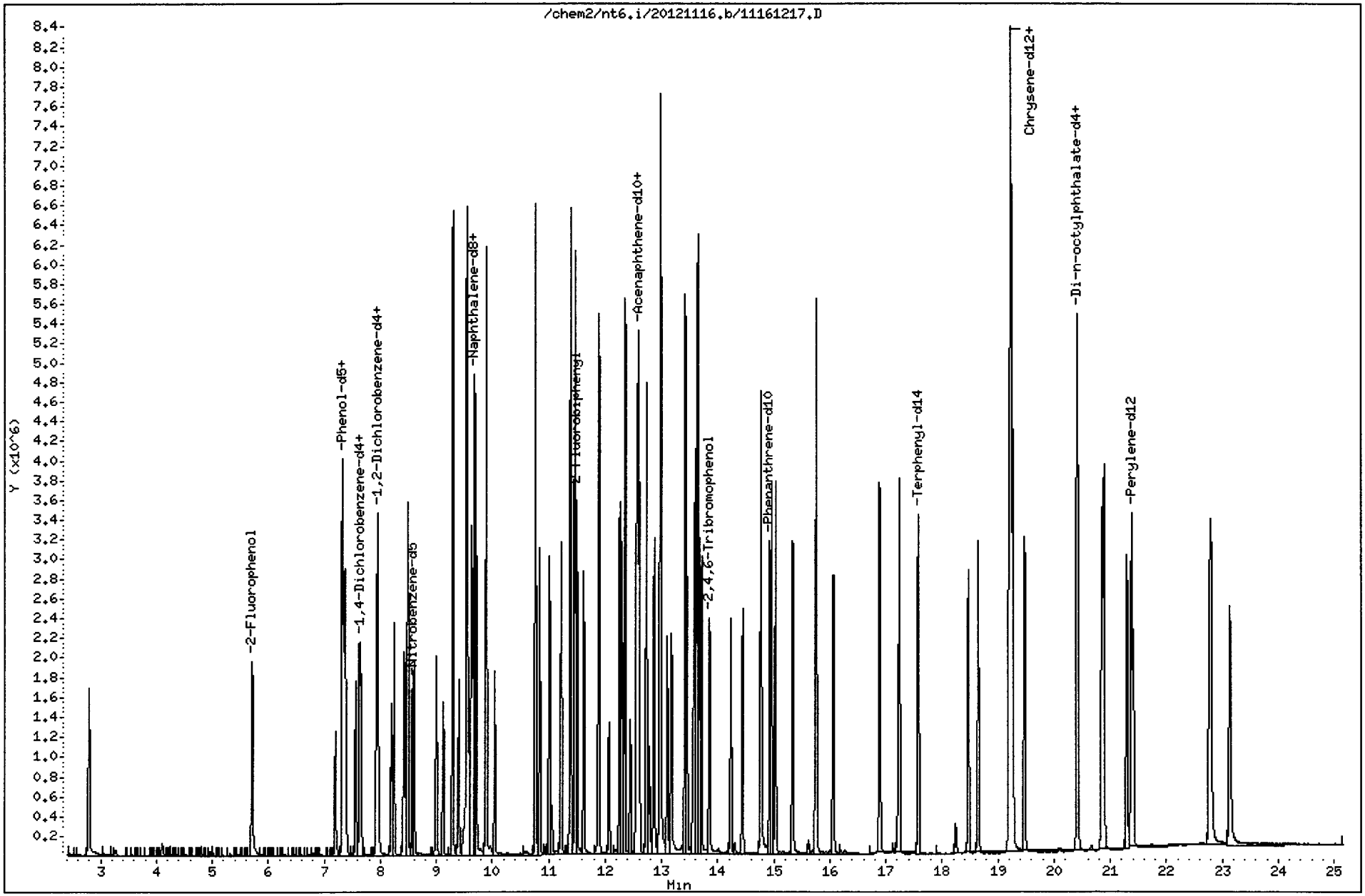
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
43 3-Nitroaniline	75.00	67.26	89.67	21-150
44 Acenaphthene	25.00	18.91	75.64	51-100
45 2,4-Dinitrophenol	137.5	120.4	87.54	12-169
46 Dibenzofuran	25.00	18.50	74.00	57-100
47 4-Nitrophenol	75.00	71.93	95.90	35-119
48 2,4-Dinitrotoluene	75.00	74.66	99.55	58-117
49 Fluorene	25.00	19.86	79.45	56-104
50 Diethylphthalate	25.00	23.12	92.47	52-111
51 4-Chlorophenyl-phe	25.00	21.66	86.65	55-104
52 4-Nitroaniline	75.00	71.23	94.97	49-112
53 4,6-Dinitro-2-meth	137.5	133.1	96.79	13-139
54 N-Nitrosodiphenyla	25.00	19.22	76.90	60-136
56 4-Bromophenyl-phen	25.00	20.21	80.83	50-103
57 Hexachlorobenzene	25.00	20.53	82.14	54-106
58 Pentachlorophenol	75.00	62.39	83.18	46-114
60 Phenanthrene	25.00	20.29	81.15	56-102
61 Anthracene	25.00	19.47	77.88	56-101
62 Carbazole	25.00	23.35	93.39	60-108
63 Di-n-butylphthalat	25.00	23.26	93.06	56-112
64 Fluoranthene	25.00	22.21	88.84	57-110
65 Pyrene	25.00	19.51	78.03	48-119
67 Butylbenzylphthala	25.00	22.24	88.95	51-114
68 Benzo(a)anthracene	25.00	21.40	85.59	55-105
70 3,3'-Dichlorobenzi	75.00	68.24	90.99	10-128
71 Chrysene	25.00	20.92	83.68	55-104
72 bis(2-Ethylhexyl)p	25.00	21.10	84.40	28-164
73 Di-n-octylphthalat	25.00	21.26	85.03	57-107
74 Benzo(b)fluoranthe	25.00	19.16	76.66	53-112
75 Benzo(k)fluoranthe	25.00	21.52	86.07	50-116
76 Benzo(a)pyrene	25.00	18.56	74.23	45-103
78 Indeno(1,2,3-cd)py	25.00	16.26	65.05	35-118
79 Dibenzo(a,h)anthra	25.00	17.45	69.80	42-119
80 Benzo(g,h,i)peryle	25.00	16.09	64.35	39-123
91 Aniline	75.00	11.81	15.75	10-100
111 Azobenzene (1,2-DP	25.00	22.33	89.32	57-109
90 N-Nitrosodimethyla	75.00	53.66	71.55	49-100
105 1-methylnaphthalen	25.00	23.34	93.35	46-100
144 alpha-Terpineol	25.00	0.000	*	30-160
187 Total Benzofluoran	50.00	40.07	80.15	30-160

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	37.50	26.88	71.68	46-100

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 2 Phenol-d5	37.50	29.77	79.39	50-100
$ 5 2-Chlorophenol-d4	37.50	29.38	78.34	53-100
$ 10 1,2-Dichlorobenzen	25.00	17.05	68.21	38-100
$ 18 Nitrobenzene-d5	25.00	20.15	80.61	46-100
$ 36 2-Fluorobiphenyl	25.00	20.96	83.83	49-100
$ 55 2,4,6-Tribromophen	37.50	40.79	108.78	52-123
$ 66 Terphenyl-d14	25.00	24.20	96.82	53-119

Data File: /chem2/nt6.i/20121116.b/11161217.D
Date : 16-NOV-2012 18:44
Client ID: VR80LCSDW1
Sample Info: VR80LCSDW1,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 11161217.D

Lab ID: VR80LCSDW1, Method: SW846101912.m, Instrument: nt6.i, Date: 16-NOV-20

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121116.b/11161218.D
Lab Smp Id: VR80A Client Smp ID: HT-01-W-C-121107
Inj Date : 16-NOV-2012 19:19
Operator : JZ Inst ID: nt6.i
Smp Info : VR80A
Misc Info : 12-22456
Comment : 1ul Injection
Method : /chem2/nt6.i/20121116.b/SW846101912.m
Meth Date : 19-Nov-2012 13:14 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 20:20 Cal File: 10191208.D
Als bottle: 18
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LL.sub
Target Version: 3.50

11/19/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$ 1	2-Fluorophenol	112	5.699	5.713	(0.748)	807422	26.1362	26.14
$ 2	Phenol-d5	99	7.312	7.321	(0.959)	1072992	27.9813	27.98
3	Phenol	94	Compound Not Detected.					
$ 5	2-Chlorophenol-d4	132	7.355	7.358	(0.965)	913999	28.8115	28.81
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	7.622	7.625	(1.000)	464086	20.0000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	7.921	7.925	(1.039)	407095	17.8894	17.89
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	8.568	8.571	(0.885)	678691	19.4700	19.47
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	9.679	9.682	(1.000)	1650639	20.0000	
	28 Naphthalene	128	Compound Not Detected.					
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	141	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	11.490	11.498	(0.916)	1310267	19.8293	19.83
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	12.542	12.551	(1.000)	995520	20.0000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	Compound Not Detected.					
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	Compound Not Detected.					
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	Compound Not Detected.					
	49 Fluorene	166	Compound Not Detected.					
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	13.846	13.854	(1.104)	290009	34.1574	34.16
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	14.914	14.923	(1.000)	1624314	20.0000	
	60 Phenanthrene	178	Compound Not Detected.					
	61 Anthracene	178	Compound Not Detected.					
	62 Carbazole	167	Compound Not Detected.					
	63 Di-n-butylphthalate	149	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	64 Fluoranthene	202	Compound Not Detected.					
	65 Pyrene	202	Compound Not Detected.					
$	66 Terphenyl-d14	244	17.569	17.572	(0.914)	1326274	20.5993	20.60
	67 Butylbenzylphthalate	149	Compound Not Detected.					
	68 Benzo(a)anthracene	228	Compound Not Detected.					
*	69 Chrysene-d12	240	19.215	19.228	(1.000)	1749260	20.0000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	Compound Not Detected.					
	72 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
*	134 Di-n-octylphthalate-d4	153	20.400	20.409	(1.000)	2218777	20.0000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	Compound Not Detected.					
	75 Benzo(k)fluoranthene	252	Compound Not Detected.					
	76 Benzo(a)pyrene	252	Compound Not Detected.					
*	77 Perylene-d12	264	21.367	21.381	(1.000)	1713738	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	141	Compound Not Detected.					
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
	187 Total Benzofluoranthenes	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 11161218.D
Lab Smp Id: VR80A
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22456

Calibration Date: 16-NOV-2012
Calibration Time: 09:31
Client Smp ID: HT-01-W-C-121107
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	464086	-36.94
27 Naphthalene-d8	2597762	1298881	5195524	1650639	-36.46
42 Acenaphthene-d10	1503943	751972	3007886	995520	-33.81
59 Phenanthrene-d10	2402003	1201002	4804006	1624314	-32.38
69 Chrysene-d12	2331938	1165969	4663876	1749260	-24.99
134 Di-n-octylphthala	2790605	1395302	5581210	2218777	-20.49
77 Perylene-d12	2485610	1242805	4971220	1713738	-31.05

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.63	7.13	8.13	7.62	-0.04
27 Naphthalene-d8	9.68	9.18	10.18	9.68	-0.03
42 Acenaphthene-d10	12.55	12.05	13.05	12.54	-0.07
59 Phenanthrene-d10	14.92	14.42	15.42	14.91	-0.06
69 Chrysene-d12	19.23	18.73	19.73	19.21	-0.07
134 Di-n-octylphthala	20.41	19.91	20.91	20.40	-0.04
77 Perylene-d12	21.38	20.88	21.88	21.37	-0.07

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

Analytical Resources, Inc.

RECOVERY REPORT

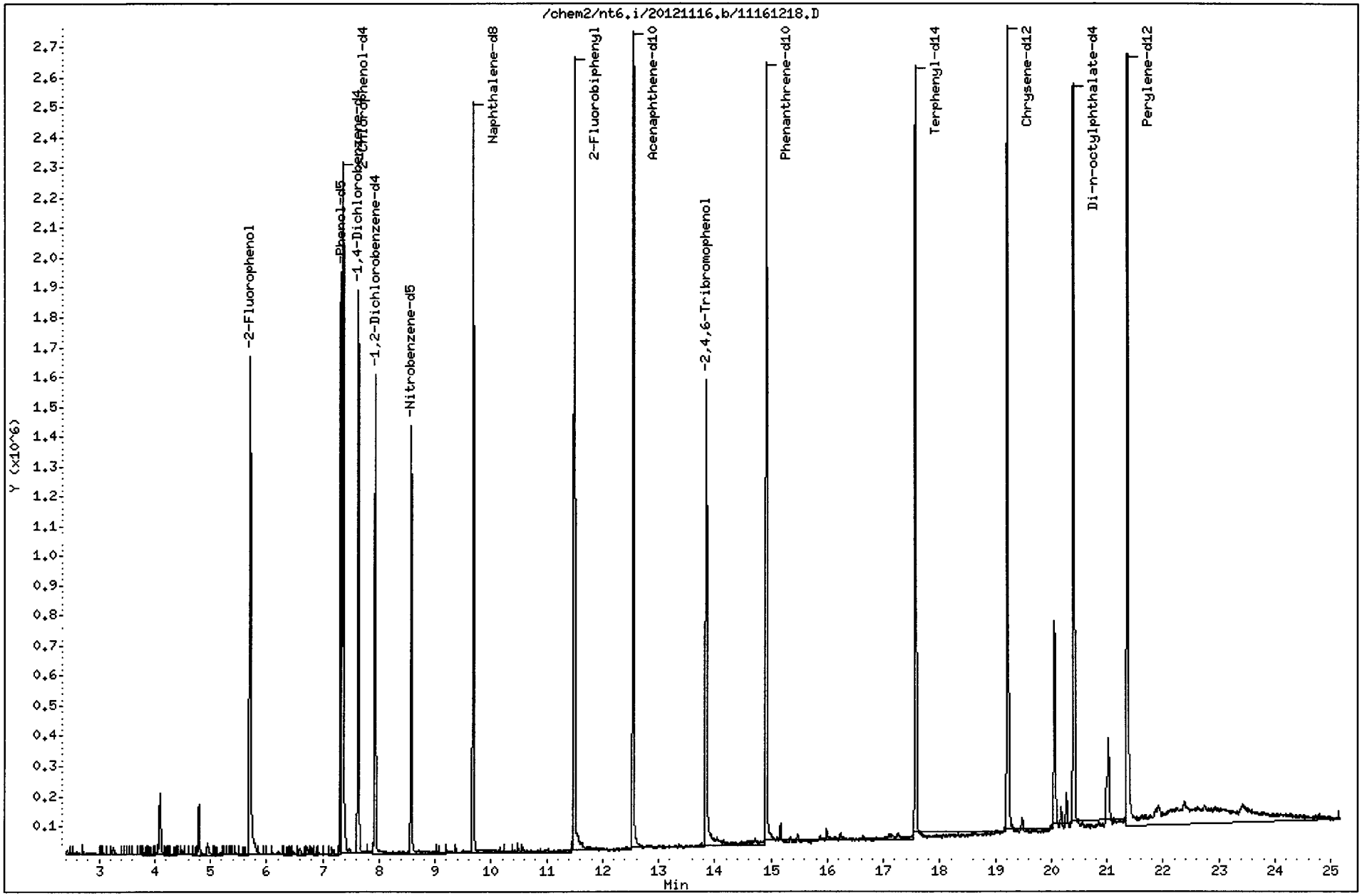
Client Name: Anchor QEA, LLC
Sample Matrix: LIQUID
Lab Smp Id: VR80A
Level: LOW
Data Type: MS DATA
SpikeList File: LLLCS.spk
Sublist File: LL.sub
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22456

Client SDG: VR80
Fraction: SV
Client Smp ID: HT-01-W-C-121107
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	37.50	26.14	69.70	38-100
$ 2 Phenol-d5	37.50	27.98	74.62	41-100
$ 5 2-Chlorophenol-d4	37.50	28.81	76.83	44-100
$ 10 1,2-Dichlorobenzen	25.00	17.89	71.56	32-100
$ 18 Nitrobenzene-d5	25.00	19.47	77.88	39-100
$ 36 2-Fluorobiphenyl	25.00	19.83	79.32	42-100
$ 55 2,4,6-Tribromophen	37.50	34.16	91.09	48-118
$ 66 Terphenyl-d14	25.00	20.60	82.40	28-121

Data File: /chem2/nt6.i/20121116.b/11161218.D
Date : 16-NOV-2012 19:19
Client ID: HT-01-W-C-121107
Sample Info: VR80A
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 11161218.D

Lab ID: VR80A, Method: SW846101912.m, Instrument: nt6.i, Date: 16-NOV-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121116.b/11161219.D
Lab Smp Id: VR80B Client Smp ID: HT-04-W-C-121107
Inj Date : 16-NOV-2012 19:54
Operator : JZ Inst ID: nt6.i
Smp Info : VR80B
Misc Info : 12-22457
Comment : 1ul Injection
Method : /chem2/nt6.i/20121116.b/SW846101912.m
Meth Date : 19-Nov-2012 13:14 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 20:20 Cal File: 10191208.D
Als bottle: 19
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LL.sub
Target Version: 3.50

11/19/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
$ 1	2-Fluorophenol	112	5.700	5.713	(0.748)	887846	24.4807	24.48
$ 2	Phenol-d5	99	7.313	7.321	(0.959)	1133235	25.1731	25.17
3	Phenol	94	Compound Not Detected.					
$ 5	2-Chlorophenol-d4	132	7.356	7.358	(0.965)	999642	26.8417	26.84
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	7.623	7.625	(1.000)	544820	20.0000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	7.922	7.925	(1.039)	458141	17.1492	17.15
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	8.569	8.571	(0.885)	742241	18.2614	18.26
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	9.680	9.682	(1.000)	1924677	20.0000	
	28 Naphthalene	128	Compound Not Detected.					
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	141	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	11.491	11.498	(0.916)	1359182	17.7126	17.71
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	12.543	12.551	(1.000)	1156089	20.0000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	Compound Not Detected.					
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	Compound Not Detected.					
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	Compound Not Detected.					
	49 Fluorene	166	Compound Not Detected.					
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	13.847	13.854	(1.104)	305787	31.0135	31.01
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	14.915	14.923	(1.000)	1887865	20.0000	
	60 Phenanthrene	178	Compound Not Detected.					
	61 Anthracene	178	Compound Not Detected.					
	62 Carbazole	167	Compound Not Detected.					
	63 Di-n-butylphthalate	149	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	64 Fluoranthene	202	Compound Not Detected.					
	65 Pyrene	202	Compound Not Detected.					
$	66 Terphenyl-d14	244	17.570	17.572	(0.914)	1260130	16.7424	16.74
	67 Butylbenzylphthalate	149	Compound Not Detected.					
	68 Benzo(a)anthracene	228	Compound Not Detected.					
*	69 Chrysene-d12	240	19.221	19.228	(1.000)	2044893	20.0000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	Compound Not Detected.					
	72 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
*	134 Di-n-octylphthalate-d4	153	20.407	20.409	(1.000)	2579354	20.0000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	Compound Not Detected.					
	75 Benzo(k)fluoranthene	252	Compound Not Detected.					
	76 Benzo(a)pyrene	252	Compound Not Detected.					
*	77 Perylene-d12	264	21.374	21.381	(1.000)	2003420	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	141	Compound Not Detected.					
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
	187 Total Benzofluoranthenes	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 11161219.D
Lab Smp Id: VR80B
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22457

Calibration Date: 16-NOV-2012
Calibration Time: 09:31
Client Smp ID: HT-04-W-C-121107
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	544820	-25.97
27 Naphthalene-d8	2597762	1298881	5195524	1924677	-25.91
42 Acenaphthene-d10	1503943	751972	3007886	1156089	-23.13
59 Phenanthrene-d10	2402003	1201002	4804006	1887865	-21.40
69 Chrysene-d12	2331938	1165969	4663876	2044893	-12.31
134 Di-n-octylphthala	2790605	1395302	5581210	2579354	-7.57
77 Perylene-d12	2485610	1242805	4971220	2003420	-19.40

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.63	7.13	8.13	7.62	-0.03
27 Naphthalene-d8	9.68	9.18	10.18	9.68	-0.02
42 Acenaphthene-d10	12.55	12.05	13.05	12.54	-0.06
59 Phenanthrene-d10	14.92	14.42	15.42	14.92	-0.05
69 Chrysene-d12	19.23	18.73	19.73	19.22	-0.04
134 Di-n-octylphthala	20.41	19.91	20.91	20.41	-0.01
77 Perylene-d12	21.38	20.88	21.88	21.37	-0.04

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

Analytical Resources, Inc.

RECOVERY REPORT

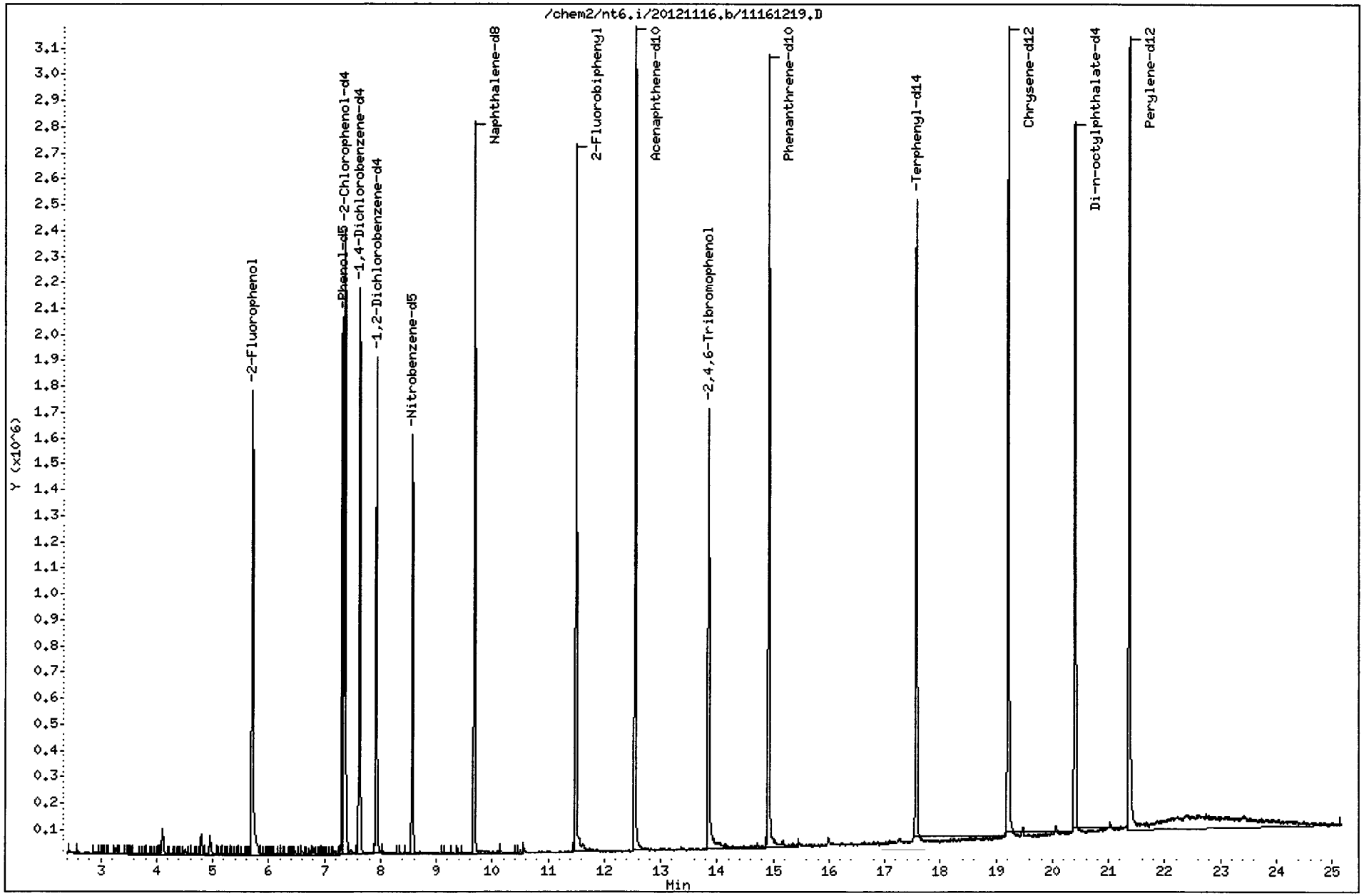
Client Name: Anchor QEA, LLC
Sample Matrix: LIQUID
Lab Smp Id: VR80B
Level: LOW
Data Type: MS DATA
SpikeList File: LLLCS.spk
Sublist File: LL.sub
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22457

Client SDG: VR80
Fraction: SV
Client Smp ID: HT-04-W-C-121107
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	37.50	24.48	65.28	38-100
$ 2 Phenol-d5	37.50	25.17	67.13	41-100
$ 5 2-Chlorophenol-d4	37.50	26.84	71.58	44-100
$ 10 1,2-Dichlorobenzen	25.00	17.15	68.60	32-100
$ 18 Nitrobenzene-d5	25.00	18.26	73.05	39-100
$ 36 2-Fluorobiphenyl	25.00	17.71	70.85	42-100
$ 55 2,4,6-Tribromophen	37.50	31.01	82.70	48-118
$ 66 Terphenyl-d14	25.00	16.74	66.97	28-121

Data File: /chem2/nt6.i/20121116.b/11161219.D
Date : 16-NOV-2012 19:54
Client ID: HT-04-W-C-121107
Sample Info: VR80B
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 11161219.D

Lab ID: VR80B, Method: SW846101912.m, Instrument: nt6.i, Date: 16-NOV-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121116.b/11161220.D
Lab Smp Id: VR80C Client Smp ID: HT-04-W-C-dup-12110
Inj Date : 16-NOV-2012 20:28
Operator : JZ Inst ID: nt6.i
Smp Info : VR80C
Misc Info : 12-22458
Comment : 1ul Injection
Method : /chem2/nt6.i/20121116.b/SW846101912.m
Meth Date : 19-Nov-2012 13:14 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 20:20 Cal File: 10191208.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LL.sub
Target Version: 3.50

AZ 11/19/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$	1 2-Fluorophenol	112	5.705	5.713	(0.748)	953389	26.1977	26.20
$	2 Phenol-d5	99	7.313	7.321	(0.959)	1201037	26.5876	26.59
	3 Phenol	94	Compound Not Detected.					
$	5 2-Chlorophenol-d4	132	7.356	7.358	(0.965)	1023801	27.3960	27.40
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	7.623	7.625	(1.000)	546697	20.0000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	7.922	7.925	(1.039)	419790	15.6597	15.66
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	Compound Not Detected.					
	14 2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	8.568	8.571	(0.885)	767502	18.6875	18.69
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	9.679	9.682	(1.000)	1944802	20.0000	
	28 Naphthalene	128	Compound Not Detected.					
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	141	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	11.490	11.498	(0.916)	1344432	17.6803	17.68
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	12.543	12.551	(1.000)	1145634	20.0000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	Compound Not Detected.					
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	Compound Not Detected.					
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	Compound Not Detected.					
	49 Fluorene	166	Compound Not Detected.					
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	13.846	13.854	(1.104)	317579	32.5034	32.50
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	14.915	14.923	(1.000)	1884886	20.0000	
	60 Phenanthrene	178	Compound Not Detected.					
	61 Anthracene	178	Compound Not Detected.					
	62 Carbazole	167	Compound Not Detected.					
	63 Di-n-butylphthalate	149	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	64 Fluoranthene	202	Compound Not Detected.					
	65 Pyrene	202	Compound Not Detected.					
$	66 Terphenyl-d14	244	17.570	17.572	(0.914)	1354287	18.3895	18.39
	67 Butylbenzylphthalate	149	Compound Not Detected.					
	68 Benzo(a)anthracene	228	Compound Not Detected.					
*	69 Chrysene-d12	240	19.215	19.228	(1.000)	2000842	20.0000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	Compound Not Detected.					
	72 bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
*	134 Di-n-octylphthalate-d4	153	20.406	20.409	(1.000)	2566892	20.0000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	Compound Not Detected.					
	75 Benzo(k)fluoranthene	252	Compound Not Detected.					
	76 Benzo(a)pyrene	252	Compound Not Detected.					
*	77 Perylene-d12	264	21.373	21.381	(1.000)	1971443	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	141	Compound Not Detected.					
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
	187 Total Benzofluoranthenes	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 11161220.D
Lab Smp Id: VR80C
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22458

Calibration Date: 16-NOV-2012
Calibration Time: 09:31
Client Smp ID: HT-04-W-C-dup-12
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	546697	-25.71
27 Naphthalene-d8	2597762	1298881	5195524	1944802	-25.14
42 Acenaphthene-d10	1503943	751972	3007886	1145634	-23.82
59 Phenanthrene-d10	2402003	1201002	4804006	1884886	-21.53
69 Chrysene-d12	2331938	1165969	4663876	2000842	-14.20
134 Di-n-octylphthala	2790605	1395302	5581210	2566892	-8.02
77 Perylene-d12	2485610	1242805	4971220	1971443	-20.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.63	7.13	8.13	7.62	-0.04
27 Naphthalene-d8	9.68	9.18	10.18	9.68	-0.03
42 Acenaphthene-d10	12.55	12.05	13.05	12.54	-0.06
59 Phenanthrene-d10	14.92	14.42	15.42	14.91	-0.05
69 Chrysene-d12	19.23	18.73	19.73	19.22	-0.07
134 Di-n-octylphthala	20.41	19.91	20.91	20.41	-0.01
77 Perylene-d12	21.38	20.88	21.88	21.37	-0.04

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

Analytical Resources, Inc.

RECOVERY REPORT

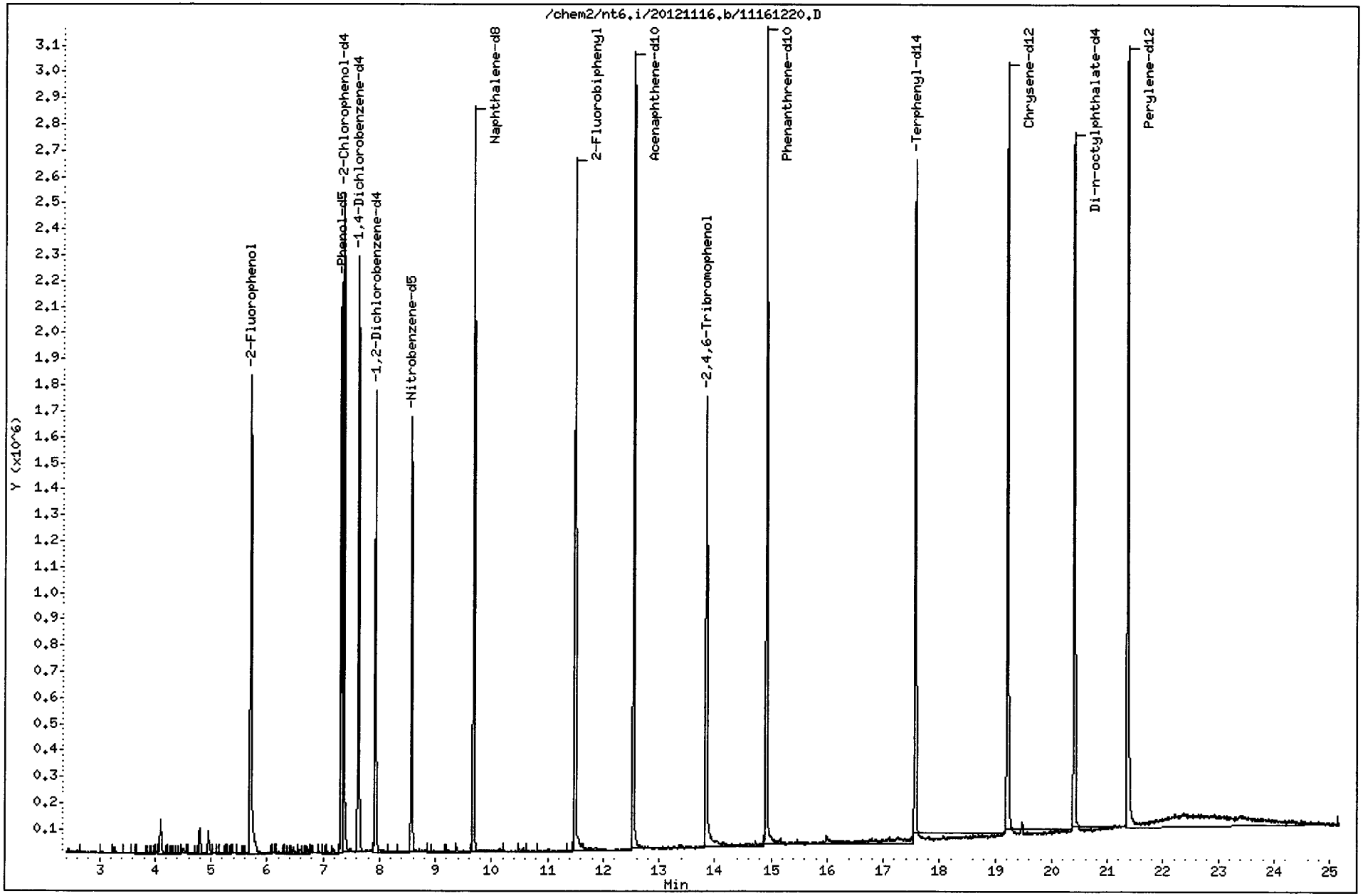
Client Name: Anchor QEA, LLC
Sample Matrix: LIQUID
Lab Smp Id: VR80C
Level: LOW
Data Type: MS DATA
SpikeList File: LLLCS.spk
Sublist File: LL.sub
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22458

Client SDG: VR80
Fraction: SV
Client Smp ID: HT-04-W-C-dup-12110
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	37.50	26.20	69.86	38-100
$ 2 Phenol-d5	37.50	26.59	70.90	41-100
$ 5 2-Chlorophenol-d4	37.50	27.40	73.06	44-100
$ 10 1,2-Dichlorobenzen	25.00	15.66	62.64	32-100
$ 18 Nitrobenzene-d5	25.00	18.69	74.75	39-100
$ 36 2-Fluorobiphenyl	25.00	17.68	70.72	42-100
$ 55 2,4,6-Tribromophen	37.50	32.50	86.68	48-118
$ 66 Terphenyl-d14	25.00	18.39	73.56	28-121

Data File: /chem2/nt6.i/20121116.b/11161220.D
Date : 16-NOV-2012 20:28
Client ID: HT-04-W-C-dup-12110
Sample Info: VR80C
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



CO-ELUTION SUMMARY FOR FILE - 11161220.D

Lab ID: VR80C, Method: SW846101912.m, Instrument: nt6.i, Date: 16-NOV-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem2/nt6.i/20121116.b/11161221.D
Lab Smp Id: VR80D Client Smp ID: WS-10-W-C-121107
Inj Date : 16-NOV-2012 21:02
Operator : JZ Inst ID: nt6.i
Smp Info : VR80D
Misc Info : 12-22459
Comment : 1ul Injection
Method : /chem2/nt6.i/20121116.b/SW846101912.m
Meth Date : 19-Nov-2012 13:14 jianqing Quant Type: ISTD
Cal Date : 19-OCT-2012 20:20 Cal File: 10191208.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: LL.sub
Target Version: 3.50

11/19/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
$ 1	2-Fluorophenol	112	5.700	5.713	(0.748)	914581	25.5545	25.55
$ 2	Phenol-d5	99	7.308	7.321	(0.959)	1178886	26.5366	26.54
3	Phenol	94	Compound Not Detected.					
$ 5	2-Chlorophenol-d4	132	7.351	7.358	(0.964)	1018390	27.7100	27.71
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	7.624	7.625	(1.000)	537645	20.0000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	7.923	7.925	(1.039)	454331	17.2335	17.23
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	45	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
	15 4-Methylphenol	108	Compound Not Detected.					
$	18 Nitrobenzene-d5	82	8.564	8.571	(0.885)	761124	18.9813	18.98
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	9.680	9.682	(1.000)	1898784	20.0000	
	28 Naphthalene	128	Compound Not Detected.					
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	141	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					
	34 2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35 2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36 2-Fluorobiphenyl	172	11.491	11.498	(0.916)	1386410	19.0821	19.08
	37 2-Chloronaphthalene	162	Compound Not Detected.					
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	Compound Not Detected.					
	40 Acenaphthylene	152	Compound Not Detected.					
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	12.544	12.551	(1.000)	1094618	20.0000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	Compound Not Detected.					
	45 2,4-Dinitrophenol	184	Compound Not Detected.					
	46 Dibenzofuran	168	Compound Not Detected.					
	47 4-Nitrophenol	109	Compound Not Detected.					
	48 2,4-Dinitrotoluene	165	Compound Not Detected.					
	50 Diethylphthalate	149	Compound Not Detected.					
	49 Fluorene	166	Compound Not Detected.					
	51 4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55 2,4,6-Tribromophenol	330	13.847	13.854	(1.104)	313328	33.5629	33.56
	56 4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	14.916	14.923	(1.000)	1845455	20.0000	
	60 Phenanthrene	178	Compound Not Detected.					
	61 Anthracene	178	Compound Not Detected.					
	62 Carbazole	167	Compound Not Detected.					
	63 Di-n-butylphthalate	149	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	64 Fluoranthene	202	Compound Not Detected.					
	65 Pyrene	202	Compound Not Detected.					
$	66 Terphenyl-d14	244	17.571	17.572	(0.914)	1478381	21.3282	21.33
	67 Butylbenzylphthalate	149	Compound Not Detected.					
	68 Benzo(a)anthracene	228	Compound Not Detected.					
*	69 Chrysene-d12	240	19.221	19.228	(1.000)	1883234	20.0000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	Compound Not Detected.					
	72 bis(2-Ethylhexyl)phthalate	149	19.472	19.480	(0.954)	53474	0.70117	0.7012
*	134 Di-n-octylphthalate-d4	153	20.407	20.409	(1.000)	2418062	20.0000	
	73 Di-n-octylphthalate	149	Compound Not Detected.					
	74 Benzo(b)fluoranthene	252	Compound Not Detected.					
	75 Benzo(k)fluoranthene	252	Compound Not Detected.					
	76 Benzo(a)pyrene	252	Compound Not Detected.					
*	77 Perylene-d12	264	21.374	21.381	(1.000)	1879682	20.0000	
	78 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	Compound Not Detected.					
	105 1-methylnaphthalene	141	Compound Not Detected.					
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					
	187 Total Benzofluoranthenes	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt6.i
Lab File ID: 11161221.D
Lab Smp Id: VR80D
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22459

Calibration Date: 16-NOV-2012
Calibration Time: 09:31
Client Smp ID: WS-10-W-C-121107
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	735905	367952	1471810	537645	-26.94
27 Naphthalene-d8	2597762	1298881	5195524	1898784	-26.91
42 Acenaphthene-d10	1503943	751972	3007886	1094618	-27.22
59 Phenanthrene-d10	2402003	1201002	4804006	1845455	-23.17
69 Chrysene-d12	2331938	1165969	4663876	1883234	-19.24
134 Di-n-octylphthala	2790605	1395302	5581210	2418062	-13.35
77 Perylene-d12	2485610	1242805	4971220	1879682	-24.38

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	7.63	7.13	8.13	7.62	-0.02
27 Naphthalene-d8	9.68	9.18	10.18	9.68	-0.02
42 Acenaphthene-d10	12.55	12.05	13.05	12.54	-0.06
59 Phenanthrene-d10	14.92	14.42	15.42	14.92	-0.05
69 Chrysene-d12	19.23	18.73	19.73	19.22	-0.04
134 Di-n-octylphthala	20.41	19.91	20.91	20.41	-0.01
77 Perylene-d12	21.38	20.88	21.88	21.37	-0.03

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

Analytical Resources, Inc.

RECOVERY REPORT

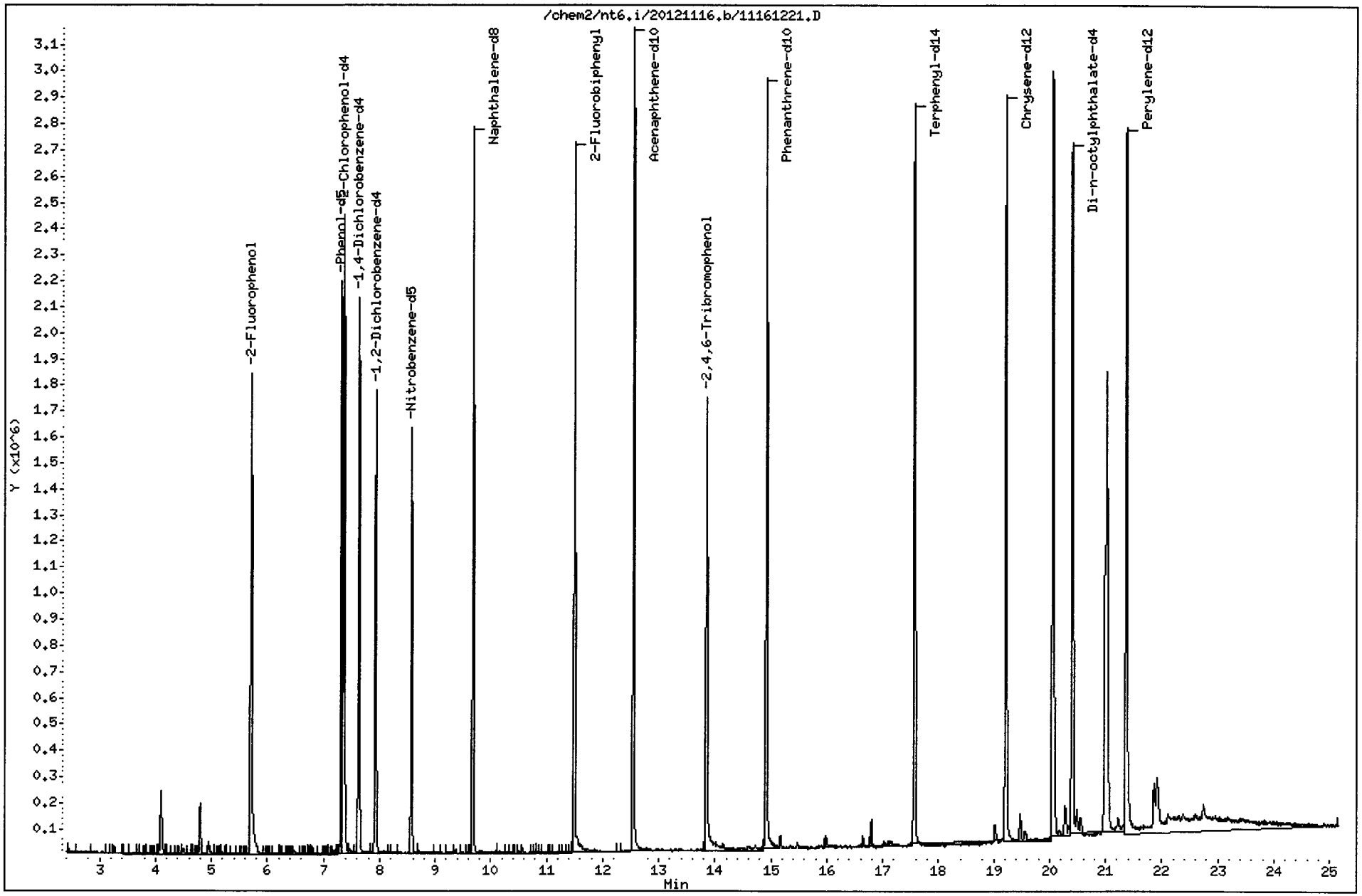
Client Name: Anchor QEA, LLC
Sample Matrix: LIQUID
Lab Smp Id: VR80D
Level: LOW
Data Type: MS DATA
SpikeList File: LLLCS.spk
Sublist File: LL.sub
Method File: /chem2/nt6.i/20121116.b/SW846101912.m
Misc Info: 12-22459

Client SDG: VR80
Fraction: SV
Client Smp ID: WS-10-W-C-121107
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 1 2-Fluorophenol	37.50	25.55	68.15	38-100
$ 2 Phenol-d5	37.50	26.54	70.76	41-100
$ 5 2-Chlorophenol-d4	37.50	27.71	73.89	44-100
$ 10 1,2-Dichlorobenzen	25.00	17.23	68.93	32-100
$ 18 Nitrobenzene-d5	25.00	18.98	75.93	39-100
$ 36 2-Fluorobiphenyl	25.00	19.08	76.33	42-100
$ 55 2,4,6-Tribromophen	37.50	33.56	89.50	48-118
$ 66 Terphenyl-d14	25.00	21.33	85.31	28-121

Data File: /chem2/nt6.i/20121116.b/11161221.D
Date : 16-NOV-2012 21:02
Client ID: WS-10-W-C-121107
Sample Info: VR80D
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt6.i
Operator: JZ
Column diameter: 0.32



Data File: /chem2/nt6.i/20121116.b/11161221.D

Date : 16-NOV-2012 21:02

Client ID: WS-10-W-C-121107

Instrument: nt6.i

Sample Info: VR80D

Volume Injected (uL): 1.0

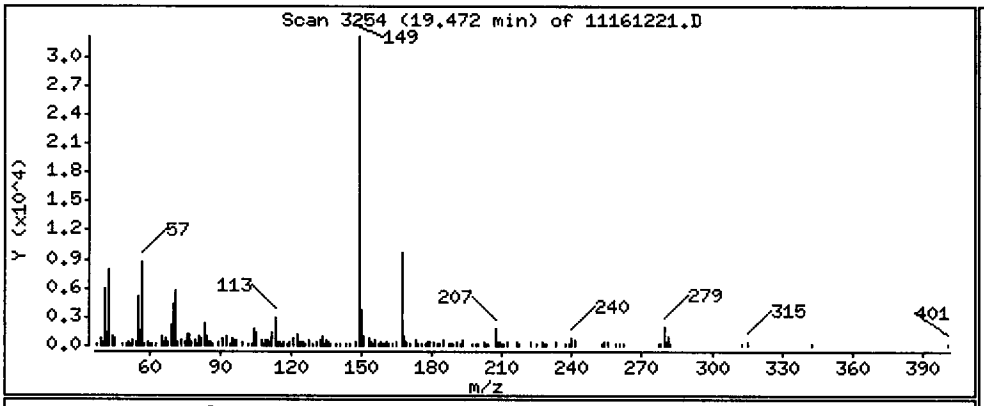
Operator: JZ

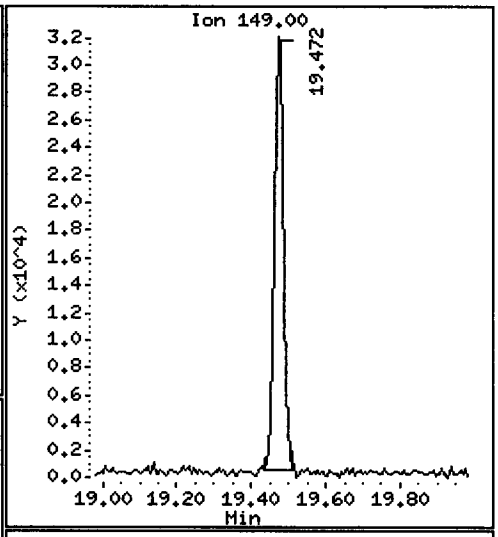
Column phase: ZB-5msi

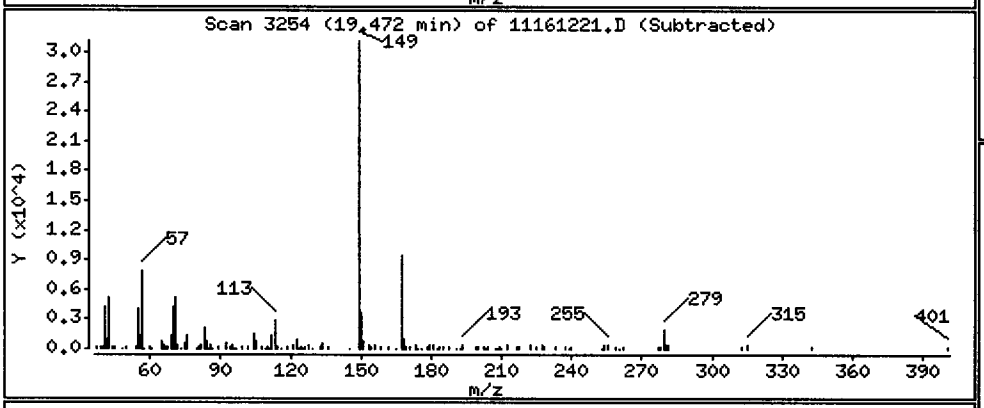
Column diameter: 0.32

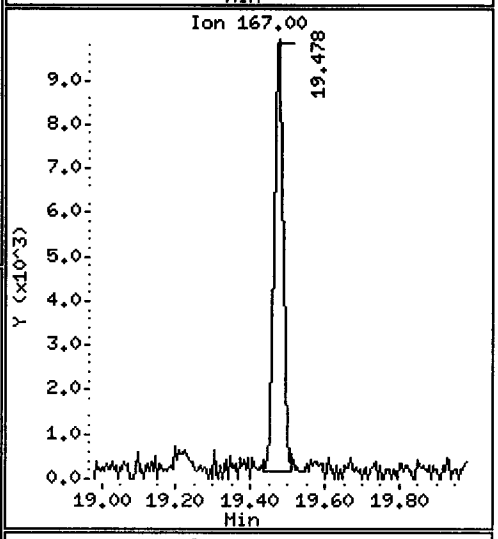
72 bis(2-Ethylhexyl)phthalate

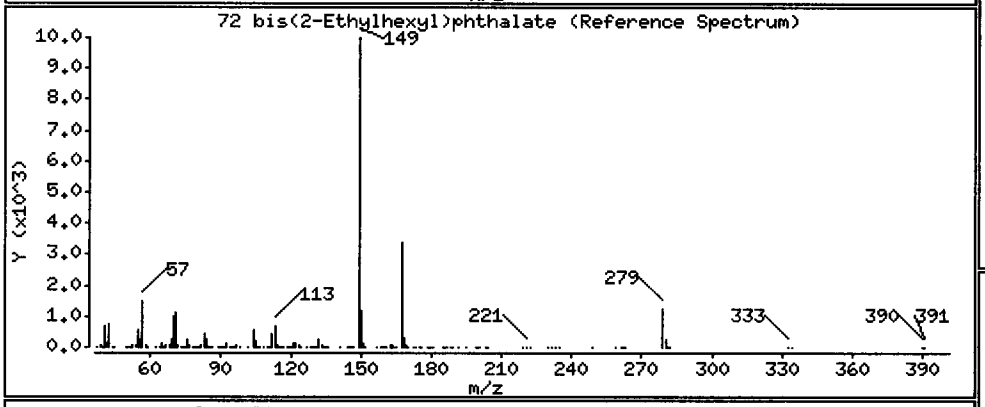
Concentration: 0.7012 ug/L

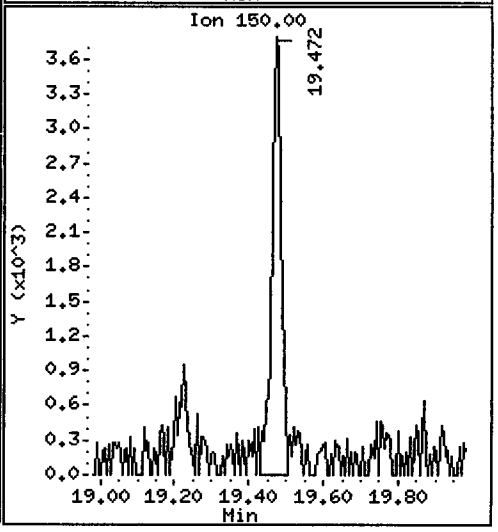


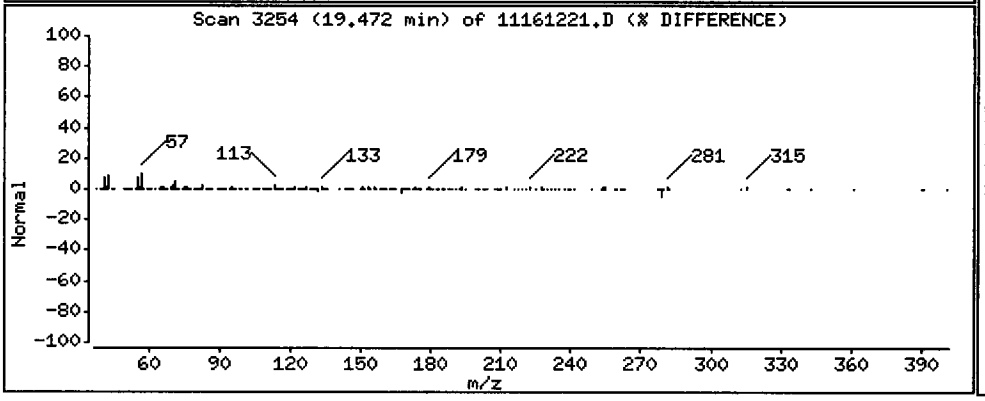












CO-ELUTION SUMMARY FOR FILE - 11161221.D

Lab ID: VR80D, Method: SW846101912.m, Instrument: nt6.i, Date: 16-NOV-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

SIM PAH Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: VR80

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

SIM PNA-Water
Liquid/Liquid (3520C) (SOP # 3311S)

Preparation Test SIM PNA # 3 (SPNAWLL) In-House (0.1ppb)

ARI Job No(s) VR80 Page 1 of 1 Batch set up by: SP

Bottle #	Extraction Requirements	Volume Extracted	Disassemble Liq/Liq (Mantle #)	(Opt) Silica Gel Clean (1:1) Y / N	Final Effective Volume	Volume to Lab	Comments	Verify Client ID
	VR80 MBW	500mL	1	(1:1) Y / (N)	0.5mL	0.5mL		ML 11/13/12
	SBW	500mL	2	(1:1) Y / (N)	0.5mL	0.5mL		
	SBW Dup.	500mL	3	(1:1) Y / (N)	0.5mL	0.5mL		**Analyst/Date**
	~~QLS~~	~~500mL~~		~~(1:1) Y / N~~	~~0.5mL~~	~~0.5mL~~		KD 80-85°C
8	VR80A	500mL	4	(1:1) Y / (N)	0.5mL	0.5mL		Hexane Exchange (2 X 10mL) 100°C
5	B	500mL	5	(1:1) Y / (N)	0.5mL	0.5mL		
~~5~~	C	500mL	6	(1:1) Y / (N)	0.5mL	0.5mL		
6	D	500mL	13	(1:1) Y / (N)	0.5mL	0.5mL		
		500mL		(1:1) Y / N	0.5mL	0.5mL		11/19/12
		500mL		(1:1) Y / N	0.5mL	0.5mL		**Analyst/Date**
		500mL		(1:1) Y / N	0.5mL	0.5mL		TurboVap (1) 2 3 Pre-Silica Gel Clean
		500mL		(1:1) Y / N	0.5mL	0.5mL		
		500mL		(1:1) Y / N	0.5mL	0.5mL		
		500mL		(1:1) Y / N	0.5mL	0.5mL		
		500mL		(1:1) Y / N	0.5mL	0.5mL		
		500mL		(1:1) Y / N	0.5mL	0.5mL		11-20-12
		500mL		(1:1) Y / N	0.5mL	0.5mL		**Analyst/Date**
		500mL		(1:1) Y / N	0.5mL	0.5mL		TurboVap 1 2 3 Post Silica Gel Clean
		500mL		(1:1) Y / N	0.5mL	0.5mL		
		500mL		(1:1) Y / N	0.5mL	0.5mL		
		500mL		(1:1) Y / N	0.5mL	0.5mL	11-20-12	
Analyst/Date	ML	11/13/12	ML 11/14/12		11-20-12	11-20-12		**Analyst/Date**

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate	B (2025-3)	15/75µg/mL	**100µL**	9/11/13	ML	AC
Spike	15 (1987-1)	15/75µg/mL	**100µL**	11/30/12	ML	AC
~~QLS Spike~~	~~4 ( )~~	~~1µg/mL~~	~~50µL~~			
Extraction Time:	1116	**Liq/Liq Start:**	1155		**Liq/Liq Stop:**	1625

SPECIAL INSTRUCTIONS: 1. Use 500mL Liq/Liq Body 2. Add 20-25mL Hexane. 3. Add ~200mL DCM to Liq/Liq.
4. Add surr/spik. 5. Extract minimum 8 hrs. 6. KD (no drying column) to ~8mL at 80°.
7. Exchange (2 X with 10mL) to Hexane at 100°. 8. TurboVap. 9. Silica Clean-up Opt-Any Color=REQ (All or none).
10. TurboVap (if Silica Clean). 11. Vial in DCM.

A. Archive Y / (N)

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

ARI Job No.: VR80

Client ID: Anchor QEA, LLC

Parameter: Sim PNA

Client Project: City of Kenmore

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☒ No Anomalies A - D	11/13/12
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
(Centrifuge#1 used for all Centrifugations)	

SIM PAH Raw Data
Initial Calibration

ARI Job ID: VR80

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC/MS,SVOA Initial Calibration Notes

ARI SOP: (801S(SIM-PNA)) 802S(Butyl Tins) 804S(SVOA-8270D) 805S(op-Pest)

Instrument: NT-4 NT-6 NT-8 NT-10 (NT11) NT12

Curve Date(s): 11/16/12 Internal Standard ID 1998-3 Expiration 7/3/2013

DFTPP Tune Meets Criteria?	(YES) / NO	Minimum Response Factors Met/	(YES) / NO
DDT Breakdown <20%?	(YES) / NO	ICV Exceeding ±20%?	YES / (NO)
Peak Tailing Factor ≤2?	(YES) / NO	ICV Exceeding ±30%?	YES / (NO)
ICal Meets %RSD & r^2 Criteria?	(YES) / NO	Linear Fits Used?	YES / (NO)
Q flag applied?	(YES) / NO (NA)	Quadratic Fits Used?	YES / (NO)
Manual Integrations for ICal?	(YES) / NO	Calibration Points Dropped?	YES / (NO)
Spectral Library Updated?	(YES) / NO		

Primary Source	Standard #	Expiration	Secondary Source	Standard #	Expiration
~~MSD Suite~~	~~2020-1~~	~~3/24/13~~	~~in house stock~~	~~2024-1~~	~~3/23/13~~

Detail problems, corrective actions and/or other pertinent information below:

ICV. finished on 11/16/12 and no SS added in.

Analyst: _____ **Date:** 11/16/12

Reviewer: _____ **Date:** 11/16/12

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-NOV-2012 18:53
End Cal Date : 15-NOV-2012 21:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Cal Date : 16-Nov-2012 09:06 jianqing
Curve Type : Average

Calibration File Names:
Level 1: /chem3/nt11.i/20121115.b/11151203.d
Level 2: /chem3/nt11.i/20121115.b/11151204.d
Level 3: /chem3/nt11.i/20121115.b/11151205.d
Level 4: /chem3/nt11.i/20121115.b/11151202.d
Level 5: /chem3/nt11.i/20121115.b/11151206.d
Level 6: /chem3/nt11.i/20121115.b/11151207.d

11/16/12

	Compound	0.10000 Level 1	0.50000 Level 2	1.000 Level 3	2.500 Level 4	5.000 Level 5	10.000 Level 6	___ RRF	% RSD
1	trans-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
2	cis-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
3	Benzo(b)thiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
7	Naphthalene	1.24513	1.16489	1.06275	1.03134	0.96314	0.94592	1.06886	10.913
14	2-Methylnaphthalene	0.65184	0.65602	0.61141	0.59572	0.55924	0.53916	0.60223	7.897
15	1-methylnaphthalene	0.66748	0.61955	0.56819	0.56573	0.52870	0.51132	0.57683	10.063
19	Biphenyl	1.68070	1.61021	1.44064	1.41051	1.30692	1.25030	1.44988	11.578
20	2,6-Dimethylnaphthalene	1.17937	1.13352	1.01503	1.02296	0.94371	0.90335	1.03299	10.312
21	Acenaphthylene	1.78022	1.82773	1.73389	1.78263	1.66886	1.63395	1.73788	4.263
23	Acenaphthene	1.31501	1.21353	1.08900	1.06662	0.99096	0.95606	1.10520	12.327
11	Dibenzofuran	1.88435	1.80363	1.59365	1.58153	1.45476	1.39664	1.61909	11.815
24	1,6,7-Trimethylnaphthalene	1.14785	1.12815	0.99487	0.97574	0.90491	0.86048	1.00200	11.586
4	C1-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
25	Fluorene	1.32085	1.37625	1.24167	1.25453	1.15913	1.11369	1.24435	7.849
5	C2-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
8	C3-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
27	Dibenzothiophene	1.23225	1.19785	1.09511	1.04878	0.99121	0.93997	1.08419	10.569
30	Phenanthrene	1.42427	1.32003	1.23036	1.15972	1.08627	1.02799	1.20811	12.242
9	C2-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
10	C1-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
31	Anthracene	1.23145	1.25026	1.16740	1.16604	1.09421	1.04924	1.15976	6.672

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-NOV-2012 18:53
End Cal Date : 15-NOV-2012 21:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Cal Date : 16-Nov-2012 09:06 jianqing
Curve Type : Average

Compound	0.10000 Level 1	0.50000 Level 2	1.000 Level 3	2.500 Level 4	5.000 Level 5	10.000 Level 6	___ RRF	% RSD
26 Carbazole	1.31272	1.29090	1.20083	1.18009	1.11888	1.06689	1.19505	7.984
13 C3_Benzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
33 1-Methylphenanthrene	0.93890	0.95365	0.88024	0.86546	0.80712	0.76723	0.86877	8.360
16 C3-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
17 C1-Benzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
18 C2-Benzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
36 Fluoranthene	1.31172	1.32463	1.22815	1.20281	1.12334	1.07176	1.21040	8.302
39 Pyrene	1.20099	1.17188	1.10228	1.10066	1.02725	1.00984	1.10215	6.882
46 Benzo(a)anthracene	1.13715	1.05919	1.00634	0.97405	0.92439	0.92870	1.00497	8.167
48 Chrysene	1.15328	1.04584	0.94987	0.93654	0.89926	0.86778	0.97543	10.864
32 C4-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
34 C1-Fluorenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
35 C2-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 Benzo(b)fluoranthene	0.97369	0.95191	0.93086	0.91509	0.86475	0.91736	0.92561	4.017
52 Benzo(k)fluoranthene	1.07737	1.03112	0.99607	1.02491	0.95418	0.94778	1.00524	4.924
64 Total Benzofluoranthenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
251 Benzo(j)fluoranthene	1.14094	1.10565	1.09053	1.04613	0.98567	0.99469	1.06060	5.895
37 C2-Phenanthrenes/Anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Benzo(e)pyrene	1.05404	1.04578	0.94565	0.94719	0.88540	0.88572	0.96063	7.741
54 Benzo(a)pyrene	0.90216	1.00440	0.94282	0.96026	0.91277	0.91867	0.94018	4.035
57 Perylene	1.11126	1.03744	0.96010	0.95202	0.90303	0.88619	0.97501	8.737
40 C3-Phenanthrenes/Anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
41 C3-Fluorenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
42 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 C1-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
44 C1-Phenanthrenes/Anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
45 C1-Fluoranthenes/Pyrenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
63 Indeno(1,2,3-cd)pyrene	0.99465	1.14591	1.14805	1.22400	1.15060	1.17571	1.13982	6.759
62 Dibenzo(a,h)anthracene	0.81645	0.93039	0.94444	0.99335	0.94388	0.94129	0.92830	6.358

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 15-NOV-2012 18:53
End Cal Date : 15-NOV-2012 21:24
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP RTE
Method file : /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Cal Date : 16-Nov-2012 09:06 jianqing
Curve Type : Average

Compound	0.10000 Level 1	0.50000 Level 2	1.000 Level 3	2.500 Level 4	5.000 Level 5	10.000 Level 6	___ RRF	% RSD
49 Naphthobenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
61 Benzo(g,h,i)perylene	0.90249	0.96118	0.97711	0.97022	0.95676	1.05036	0.96969	4.907
50 C3-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 C4-Phenanthrenes/Anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
58 C4-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
59 C3-Fluoranthenes/Pyrenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
66 C1-Naphthobenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
67 C2-Fluoranthenes/Pyrenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
68 C1-Benzo(a)anthracenes/Chryse	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
69 C2-Benzo(a)anthracenes/Chryse	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
70 C2-Fluorenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
71 C2-Naphthobenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
72 C3-Benzo(a)anthracenes/Chryse	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
73 C3-Naphthobenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
74 C1-Dibenzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
75 C2-Dibenzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
76 C3-Dibenzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
77 C4-Benzo(a)anthracenes/Chryse	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 12 2-Methylnaphthalene-d10	0.78189	0.74752	0.68223	0.67354	0.61812	0.59678	0.68335	10.487
$ 253 Fluoranthene-d10	1.22307	1.22025	1.13380	1.14675	1.08117	1.04556	1.14177	6.290
$ 60 Dibenzo(a,h)anthracene-d14	0.51832	0.62796	0.64194	0.71749	0.72083	0.75169	0.66304	12.936

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Batch File: /chem3/nt11.i/20121115.b
Inst ID: nt11.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	11151202	11151203	11151204	11151205	11151206	11151207
INJ.DATE:	15-NOV-2012	15-NOV-2012	15-NOV-2012	15-NOV-2012	15-NOV-2012	15-NOV-2012
INJ.TIME:	18:53	19:24	19:54	20:24	20:54	21:24

11/16/12

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 trans-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	4.243	1.243-7.243	+++++	+++++
	2 cis-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	4.856	1.856-7.856	+++++	+++++
	3 Benzo(b)thiophene	+++++	+++++	+++++	+++++	+++++	+++++	6.193	3.193-9.193	+++++	+++++
*	6 Naphthalene-d8	5.473	5.470	5.470	5.470	5.470	5.470	5.473	2.473-8.473	5.470	0.001
	7 Naphthalene	5.501	5.501	5.498	5.498	5.498	5.502	5.501	2.501-8.501	5.500	0.002
$	12 2-Methylnaphthalene-d1	6.208	6.205	6.205	6.205	6.208	6.208	6.208	3.208-9.208	6.207	0.002
	14 2-Methylnaphthalene	6.255	6.252	6.252	6.252	6.252	6.256	6.255	3.255-9.255	6.253	0.002
	15 1-methylnaphthalene	6.448	6.445	6.445	6.445	6.448	6.448	6.448	3.448-9.448	6.446	0.002
	19 Biphenyl	6.912	6.912	6.912	6.912	6.912	6.915	6.912	3.912-9.912	6.912	0.001
	20 2,6-Dimethylnaphthalen	6.956	6.956	6.953	6.953	6.956	6.956	6.956	3.956-9.956	6.955	0.002
	21 Acenaphthylene	7.631	7.631	7.631	7.631	7.631	7.635	7.631	4.631-10.631	7.632	0.001
*	22 Acenaphthene-d10	7.745	7.742	7.742	7.742	7.742	7.742	7.745	4.745-10.745	7.742	0.001
	23 Acenaphthene	7.792	7.789	7.789	7.792	7.792	7.796	7.792	4.792-10.792	7.792	0.002
	11 Dibenzofuran	7.944	7.941	7.941	7.941	7.944	7.944	7.944	4.944-10.944	7.942	0.002
	24 1,6,7-Trimethylnaphtha	8.016	8.013	8.016	8.016	8.016	8.020	8.016	5.016-11.016	8.016	0.002
	4 C1-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	8.826	5.826-11.826	+++++	+++++
	25 Fluorene	8.417	8.414	8.417	8.414	8.417	8.420	8.417	5.417-11.417	8.417	0.002

Reviewer 1 _____ Date: _____
Reviewer 2 _____ Date: 11/16/12

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Batch File: /chem3/nt11.i/20121115.b
Inst ID: nt11.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
5 C2-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++	10.000	7.000-13.000	+++++	+++++
8 C3-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	10.296	7.296-13.296	+++++	+++++
27 Dibenzothiophene	9.635	9.635	9.632	9.635	9.635	9.639	9.635	6.635-12.635	9.635	0.002
* 28 Phenanthrene-d10	9.761	9.761	9.761	9.761	9.761	9.762	9.761	6.761-12.761	9.761	0.000
30 Phenanthrene	9.799	9.796	9.796	9.796	9.796	9.799	9.799	6.799-12.799	9.797	0.002
9 C2-Decalin	+++++	+++++	+++++	+++++	+++++	+++++	10.453	7.453-13.453	+++++	+++++
10 C1-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++	10.453	7.453-13.453	+++++	+++++
31 Anthracene	9.840	9.834	9.834	9.834	9.837	9.840	9.840	6.840-12.840	9.837	0.003
26 Carbazole	10.348	10.345	10.345	10.345	10.348	10.352	10.348	7.348-13.348	10.347	0.003
13 C3_Benzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	11.200	8.200-14.200	+++++	+++++
33 1-Methylphenanthrene	10.547	10.544	10.544	10.544	10.547	10.550	10.547	7.547-13.547	10.546	0.003
16 C3-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++	11.600	8.600-14.600	+++++	+++++
17 C1-Benzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	11.769	8.769-14.769	+++++	+++++
18 C2-Benzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	11.842	8.842-14.842	+++++	+++++
36 Fluoranthene	11.456	11.453	11.450	11.453	11.456	11.462	11.456	8.456-14.456	11.455	0.004
$ 253 Fluoranthene-d10	11.421	11.418	11.418	11.418	11.421	11.425	11.421	8.421-14.421	11.420	0.003
39 Pyrene	11.923	11.920	11.920	11.920	11.923	11.929	11.923	8.923-14.923	11.922	0.004
46 Benzo(a)anthracene	14.261	14.255	14.255	14.255	14.261	14.268	14.261	11.261-17.261	14.259	0.005
* 47 Chrysene-d12	14.381	14.375	14.378	14.378	14.378	14.381	14.381	11.381-17.381	14.379	0.002
48 Chrysene	14.451	14.447	14.444	14.444	14.451	14.460	14.451	11.451-17.451	14.450	0.006
* 29 Fluorene-d10	+++++	+++++	+++++	+++++	+++++	13.163	13.163	10.163-16.163	13.163	0.000
32 C4-Naphthalenes	+++++	+++++	+++++	+++++	+++++	+++++	15.983	12.983-18.983	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Batch File: /chem3/nt11.i/20121115.b
Inst ID: nt11.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	34 C1-Fluorenes	+++++	+++++	+++++	+++++	+++++	+++++	16.962	13.962-19.962	+++++	+++++
	35 C2-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	17.000	14.000-20.000	+++++	+++++
	51 Benzo(b)fluoranthene	16.896	16.890	16.887	16.893	16.902	16.909	16.896	13.896-19.896	16.896	0.008
	52 Benzo(k)fluoranthene	16.959	16.947	16.947	16.950	16.962	16.975	16.959	13.959-19.959	16.957	0.011
	64 Total Benzofluoranthen	+++++	+++++	+++++	+++++	+++++	+++++	17.174	14.174-20.174	+++++	+++++
	251 Benzo(j)fluoranthene	17.032	17.022	17.022	17.022	17.035	17.051	17.032	14.032-20.032	17.031	0.011
*	38 Pyrene-d10	17.041	+++++	16.883	17.013	17.035	17.041	17.041	14.041-20.041	17.003	0.068
	37 C2-Phenanthrenes/Anthr	+++++	+++++	+++++	+++++	+++++	+++++	17.500	14.500-20.500	+++++	+++++
	55 Benzo(e)pyrene	17.789	17.786	17.780	17.780	17.792	17.805	17.789	14.789-20.789	17.789	0.010
	54 Benzo(a)pyrene	17.915	17.900	17.906	17.906	17.919	17.931	17.915	14.915-20.915	17.913	0.011
*	56 Perylene-d12	18.143	18.136	18.136	18.139	18.143	18.146	18.143	15.143-21.143	18.141	0.004
	57 Perylene	18.215	18.206	18.206	18.209	18.218	18.231	18.215	15.215-21.215	18.214	0.010
	40 C3-Phenanthrenes/Anthr	+++++	+++++	+++++	+++++	+++++	+++++	18.800	15.800-21.800	+++++	+++++
	41 C3-Fluorenes	+++++	+++++	+++++	+++++	+++++	+++++	18.831	15.831-21.831	+++++	+++++
	42 Retene	+++++	+++++	+++++	+++++	+++++	+++++	18.831	15.831-21.831	+++++	+++++
	43 C1-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	18.997	15.997-21.997	+++++	+++++
	44 C1-Phenanthrenes/Anthr	+++++	+++++	+++++	+++++	+++++	+++++	19.008	16.008-22.008	+++++	+++++
	45 C1-Fluoranthenes/Pyren	+++++	+++++	+++++	+++++	+++++	+++++	19.500	16.500-22.500	+++++	+++++
$	60 Dibenzo(a,h)anthracene	20.377	20.364	20.364	20.367	20.380	20.393	20.377	17.377-23.377	20.374	0.011
	63 Indeno(1,2,3-cd)pyrene	20.471	20.453	20.456	20.459	20.475	20.500	20.471	17.471-23.471	20.469	0.018
	62 Dibenzo(a,h)anthracene	20.468	20.453	20.459	20.459	20.471	20.497	20.468	17.468-23.468	20.468	0.016
	49 Naphthobenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	20.438	17.438-23.438	+++++	+++++
	61 Benzo(g,h,i)perylene	21.342	21.339	21.330	21.333	21.349	21.374	21.342	18.342-24.342	21.344	0.016
	50 C3-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	21.254	18.254-24.254	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Batch File: /chem3/nt11.i/20121115.b
Inst ID: nt11.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	53 C4-Phenanthrenes/Anthr	+++++	+++++	+++++	+++++	+++++	+++++	21.403	18.403-24.403	+++++	+++++
	58 C4-Dibenzothiophenes	+++++	+++++	+++++	+++++	+++++	+++++	22.001	19.001-25.001	+++++	+++++
	59 C3-Fluoranthenes/Pyren	+++++	+++++	+++++	+++++	+++++	+++++	22.500	19.500-25.500	+++++	+++++
*	65 Benzo(a)pyrene-d12	+++++	+++++	+++++	24.182	+++++	23.854	23.633	20.633-26.633	24.018	0.232
	66 C1-Naphthobenzothiophe	+++++	+++++	+++++	+++++	+++++	+++++	24.564	21.564-27.564	+++++	+++++
	67 C2-Fluoranthenes/Pyren	+++++	+++++	+++++	+++++	+++++	+++++	24.611	21.611-27.611	+++++	+++++
	68 C1-Benzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	25.122	22.122-28.122	+++++	+++++
	69 C2-Benzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	26.122	23.122-29.122	+++++	+++++
	70 C2-Fluorenes	+++++	+++++	+++++	+++++	+++++	+++++	26.436	23.436-29.436	+++++	+++++
	71 C2-Naphthobenzothiophe	+++++	+++++	+++++	+++++	+++++	+++++	26.660	23.660-29.660	+++++	+++++
	72 C3-Benzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	27.203	24.203-30.203	+++++	+++++
	73 C3-Naphthobenzothiophe	+++++	+++++	+++++	+++++	+++++	+++++	27.491	24.491-30.491	+++++	+++++
	74 C1-Dibenzo(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++	28.000	25.000-31.000	+++++	+++++
	75 C2-Dibenzo(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++	29.000	26.000-32.000	+++++	+++++
	76 C3-Dibenzo(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++	29.500	26.500-32.500	+++++	+++++
	77 C4-Benzo(a)anthracenes	+++++	+++++	+++++	+++++	+++++	+++++	30.777	27.777-33.777	+++++	+++++

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem3/nt11.i/20121115.b

ARI Job No.: DFTP Method: tune.b/DF8270.m Instrument: nt11.i Date: 15-NOV-2012

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1733	11151201.d	DFTPP1115	DFTPP1115	1	NO MANUAL INTEGRATION
1853	11151202.d	IC251115	IC251115	1	Benzo(g,h,i)perylene,
1924	11151203.d	IC011115	IC011115	1	Benzo(j)fluoranthene, Dibenzo(a,h)anthracene-d14,
1954	11151204.d	IC051115	IC051115	1	Dibenzo(a,h)anthracene-d14,
2024	11151205.d	IC11115	IC11115	1	Dibenzo(a,h)anthracene-d14,
2054	11151206.d	IC51115	IC51115	1	Benzo(k)fluoranthene, Benzo(g,h,i)perylene,
2124	11151207.d	IC101115	IC101115	1	Chrysene, Benzo(k)fluoranthene, Perylene,

11/16/12

Analytical Resources Inc.: Organics Instrument Log

NT-11 Serial No.:GC=US10140004, MS=US10481502

Date: 11/15/12 Analysis: 8270SIMPAH Analyst: KB

GC Program: 8270SIMPAH_25 Column No: 14423 Column Type: Rxi-17Sil MS

Instrument Tune (.U or .CT.): 120327 EM Voltage: 2400

Calibration File: 111512Q2 Curve Date: 11/15/12 Injection Vol.: 1µl

IS/SS	Ical/Ccal	LCS/ICV
1998-3	2070-1	2074-1

Document All Maintenance Tasks In StarLIMS

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt11.i/20121115.b

	Time	Filename	LabID	ClientId	DF								
1	1733	11151201.d	DFTPP1115	DFTPP1115	1	NO ISTDS FOUND							
2	1853	11151202.d	IC251115	IC251115	1	5.47	516111	7.74	284255	9.76	410660	14.38	467886	18.14	472330
3	1924	11151203.d	IC011115	IC011115	1	5.47	525648	7.74	281168	9.76	400894	14.37	450177	18.14	421899
4	1954	11151204.d	IC051115	IC051115	1	5.47	502178	7.74	272531	9.76	391251	14.38	452865	18.14	442240
5	2024	11151205.d	IC11115	IC11115	1	5.47	543154	7.74	299409	9.76	422941	14.38	479647	18.14	477073
6	2054	11151206.d	IC51115	IC51115	1	5.47	544640	7.74	302706	9.76	431003	14.38	495359	18.14	510632
7	2124	11151207.d	IC101115	IC101115	1	5.47	559831	7.74	320166	9.76	444629	14.38	502333	18.15	522850
8	2154	11151208.d	ICV1115	ICV1115	1	5.47	674396	7.74	364379	9.76	520591	14.38	585586	18.14	582081

wrong vial /KR

Re-run on 11/16/12

11/16/12.

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

Data File: /chem3/nt11.i/20121115.b/tune.b/11151201.d

Date : 15-NOV-2012 17:33

Client ID: DFTPP1115

Instrument: nt11.i

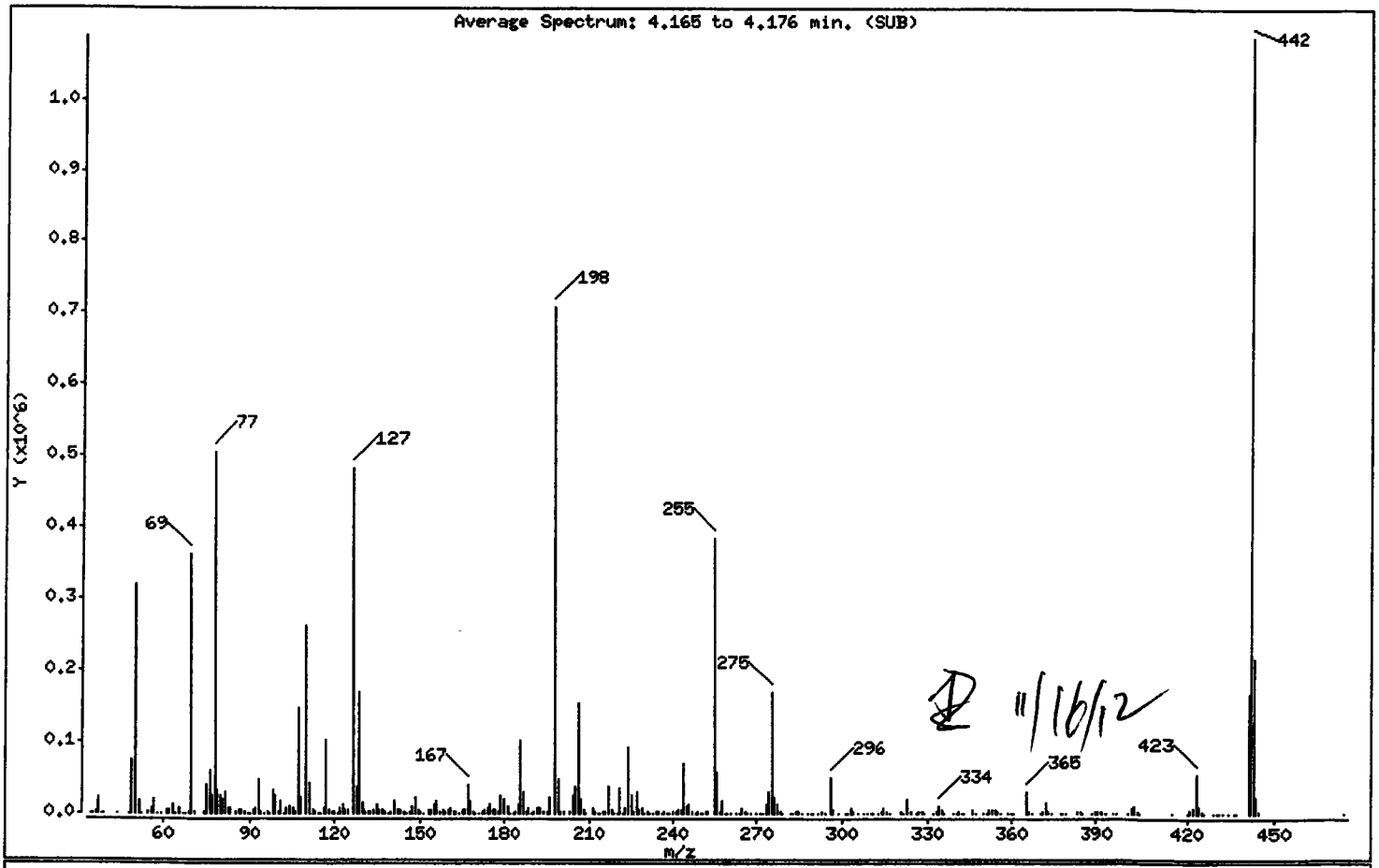
Sample Info: DFTPP1115

Operator: JZ

Column phase: Rxi-17silms

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	45.29
68	Less than 2.00% of mass 69	0.50 (0.97)
69	Mass 69 relative abundance	51.38
70	Less than 2.00% of mass 69	0.36 (0.69)
127	10.00 - 80.00% of mass 198	68.24
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.73
275	10.00 - 60.00% of mass 198	24.19
365	Greater than 1.00% of mass 198	4.30
441	0.01 - 24.00% of mass 442	23.85 (15.50)
442	50.00 - 200.00% of mass 198	153.89
443	15.00 - 24.00% of mass 442	30.94 (20.11)

Date : 15-NOV-2012 17:33

Client ID: DFTPP1115 Instrument: nt11.i

Sample Info: DFTPP1115

Operator: JZ

Column phase: Rxi-17silms Column diameter: 0.25

Data File: 11151201.d
Spectrum: Average Spectrum: 4.165 to 4.176 min. (SUB)
Location of Maximum: 442.00
Number of points: 329

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	11	132.00	1990	219.00	310	315.00	6317
37.00	1240	133.00	1756	220.00	409	316.00	2658
38.00	1997	134.00	4047	221.00	35048	317.00	481
39.00	22256	135.00	12609	222.00	180	321.00	3066
40.00	839	136.00	5881	223.00	7018	322.00	209
41.00	590	137.00	5477	224.00	92888	323.00	19768
45.00	259	138.00	2380	225.00	24792	324.00	3305
49.00	1180	139.00	776	226.00	2532	326.00	561
50.00	74248	140.00	2705	227.00	29368	327.00	3021
51.00	320576	141.00	18528	228.00	5630	328.00	1794
52.00	16488	142.00	6047	229.00	8355	329.00	621
53.00	609	143.00	4754	230.00	585	332.00	876
55.00	1660	144.00	1270	231.00	2780	333.00	3146
56.00	8473	145.00	1151	232.00	471	334.00	10218
57.00	21176	146.00	3526	233.00	396	335.00	3904
58.00	1097	147.00	9078	234.00	1412	336.00	499
59.00	181	148.00	22968	235.00	2960	339.00	478
61.00	4350	149.00	4829	236.00	1232	340.00	168
62.00	4497	150.00	2172	237.00	2389	341.00	1407
63.00	13413	151.00	1247	238.00	595	342.00	1072
64.00	1001	153.00	4276	239.00	888	343.00	182
65.00	7457	154.00	4519	240.00	1298	346.00	3866
66.00	296	155.00	11477	241.00	2134	347.00	381
67.00	529	156.00	17280	242.00	5560	350.00	424
68.00	3529	157.00	2817	243.00	5355	351.00	649
69.00	363712	158.00	4328	244.00	71264	352.00	4461
70.00	2513	159.00	2693	245.00	9302	353.00	5484
73.00	2059	160.00	5261	246.00	12169	354.00	6204
74.00	39920	161.00	6508	247.00	2883	355.00	2377
75.00	61272	162.00	3100	248.00	470	356.00	170
76.00	24584	163.00	1333	249.00	3204	359.00	241
77.00	505728	164.00	69	250.00	993	360.00	205
78.00	33720	165.00	6210	251.00	1020	361.00	222
79.00	25288	166.00	5183	252.00	1726	365.00	30416
80.00	20192	167.00	40064	253.00	1787	366.00	3494

Data File: /chem3/nt11.i/20121115.b/tune.b/11151201.d

Date : 15-NOV-2012 17:33

Client ID: DFTPP1115

Instrument: nt11.i

Sample Info: DFTPP1115

Operator: JZ

Column phase: Rxi-17silms

Column diameter: 0.25

Data File: 11151201.d
Spectrum: Average Spectrum: 4.165 to 4.176 min. (SUB)
Location of Maximum: 442.00
Number of points: 329

m/z	Y	m/z	Y	m/z	Y	m/z	Y
81.00	30984	168.00	16760	255.00	384960	367.00	389
82.00	8732	169.00	2275	256.00	56360	370.00	835
83.00	7892	170.00	941	257.00	3542	371.00	2105
85.00	2961	171.00	1035	258.00	17464	372.00	14192
86.00	5742	172.00	2834	259.00	1184	373.00	2883
87.00	3892	173.00	3759	260.00	578	374.00	835
88.00	1275	174.00	7655	261.00	1097	377.00	310
89.00	777	175.00	13136	263.00	574	378.00	261
90.00	261	176.00	4399	264.00	1143	379.00	179
91.00	5911	177.00	5275	265.00	8588	383.00	3468
92.00	7343	178.00	1539	266.00	1857	384.00	2092
93.00	47312	179.00	25912	267.00	465	385.00	280
94.00	3135	180.00	20176	268.00	277	389.00	183
95.00	1147	181.00	9450	270.00	715	390.00	1974
96.00	2971	182.00	1145	271.00	155	391.00	1660
97.00	1251	183.00	865	272.00	1112	392.00	1628
98.00	31880	184.00	2772	273.00	12144	393.00	177
99.00	25264	185.00	11657	274.00	31224	396.00	167
100.00	2832	186.00	102880	275.00	171200	397.00	621
101.00	17688	187.00	29536	276.00	23744	401.00	545
102.00	217	188.00	2720	277.00	13539	402.00	6526
103.00	6528	189.00	6670	278.00	2452	403.00	10651
104.00	10763	190.00	986	279.00	524	404.00	3360
105.00	8256	191.00	2354	282.00	808	405.00	1072
106.00	2649	192.00	6841	283.00	742	415.00	1059
107.00	146944	193.00	8375	284.00	1422	420.00	216
108.00	22632	194.00	1258	285.00	3369	421.00	6077
110.00	262528	195.00	1433	286.00	683	422.00	8458
111.00	41520	196.00	21328	288.00	378	423.00	54712
112.00	5546	198.00	707840	289.00	614	424.00	10691
113.00	2227	199.00	47616	290.00	1101	425.00	1499
114.00	183	200.00	3531	292.00	1207	426.00	308
115.00	542	201.00	3350	293.00	3236	429.00	271
116.00	7310	203.00	3698	294.00	860	430.00	341
117.00	103504	204.00	25752	296.00	49280	431.00	242

Data File: /chem3/nt11.i/20121115.b/tune.b/11151201.d

Date : 15-NOV-2012 17:33

Client ID: DFTPP1115

Instrument: nt11.i

Sample Info: DFTPP1115

Operator: JZ

Column phase: Rxi-17silms

Column diameter: 0.25

Data File: 11151201.d

Spectrum: Average Spectrum: 4.165 to 4.176 min. (SUB)

Location of Maximum: 442.00

Number of points: 329

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	5993	205.00	38528	297.00	5513	432.00	190
119.00	1442	206.00	154816	299.00	363	434.00	442
120.00	1865	207.00	19720	301.00	969	436.00	272
121.00	765	208.00	4796	302.00	1174	437.00	183
122.00	7624	209.00	1103	303.00	6621	441.00	168768
123.00	11403	211.00	6760	304.00	2376	442.00	1089024
124.00	5318	212.00	1720	306.00	188	443.00	219008
125.00	5238	213.00	378	308.00	1229	444.00	21824
127.00	483008	214.00	682	309.00	1020	445.00	1699
128.00	36568	215.00	1892	310.00	706	474.00	221
129.00	169856	216.00	2927	311.00	250		
130.00	16082	217.00	36696	313.00	144		
131.00	2705	218.00	4083	314.00	2515		

Data File: /chem3/nt11.i/20121115.b/tune.b/11151201.d

Date : 15-NOV-2012 17:33

Client ID: DFTPP1115

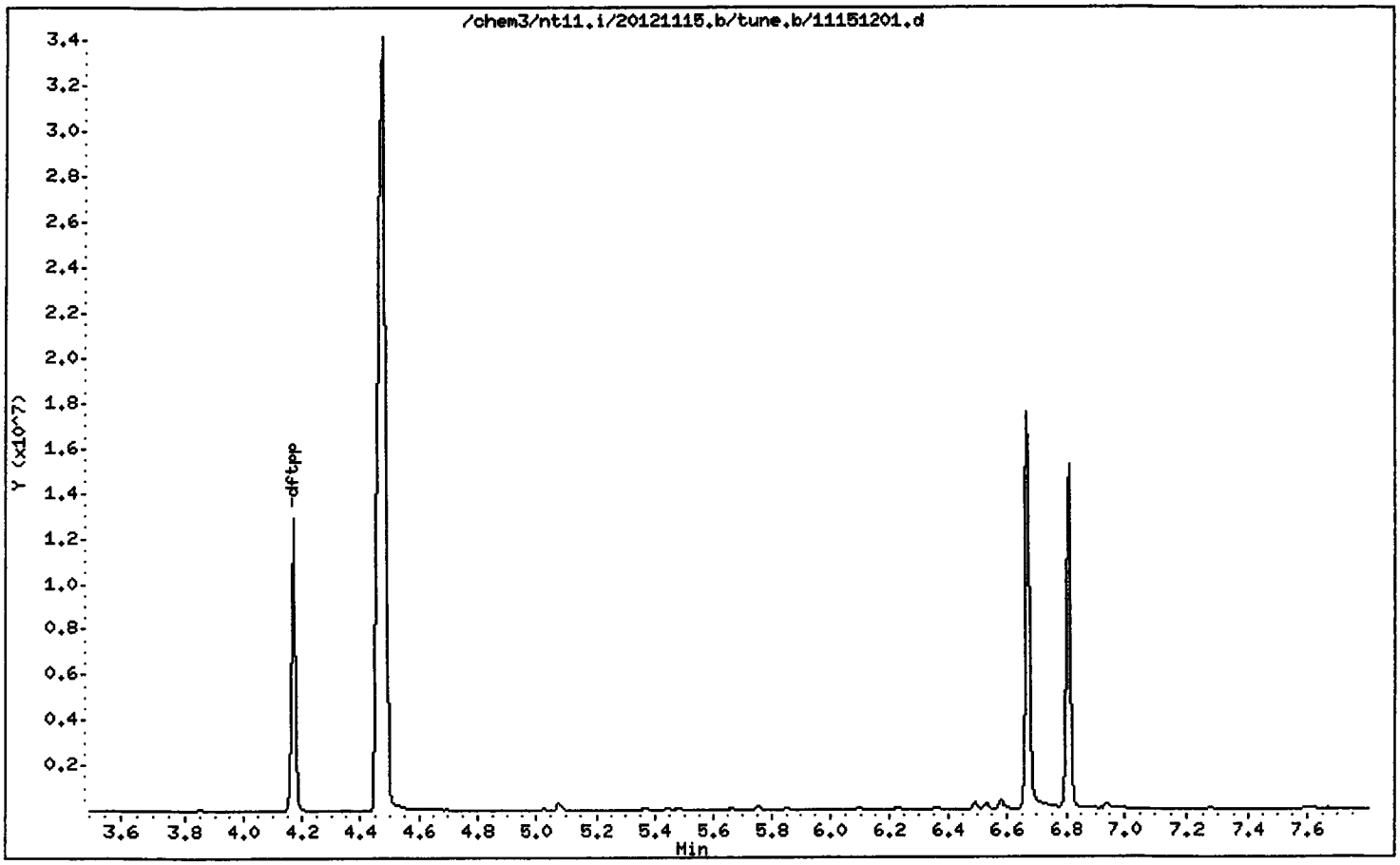
Instrument: nt11.i

Sample Info: DFTPP1115

Operator: JZ

Column phase: Rxi-17silms

Column diameter: 0.25



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem3/nt11.i/20121115.b/ddt.b/11151201.d ARI ID:
Method: /chem3/nt11.i/20121115.b/ddt.b/sw846ddt.m Misc:
Analysis Date: 15-NOV-2012 17:33 Instrument: nt11.i

COMPOUND	RT	AREA
Pentachlorophenol	4.486	7530186
Benzidine	6.671	7578439
4,4'-DDE	6.094	9809
4,4'-DDD	6.580	65764
4,4'-DDT	6.810	2868447

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

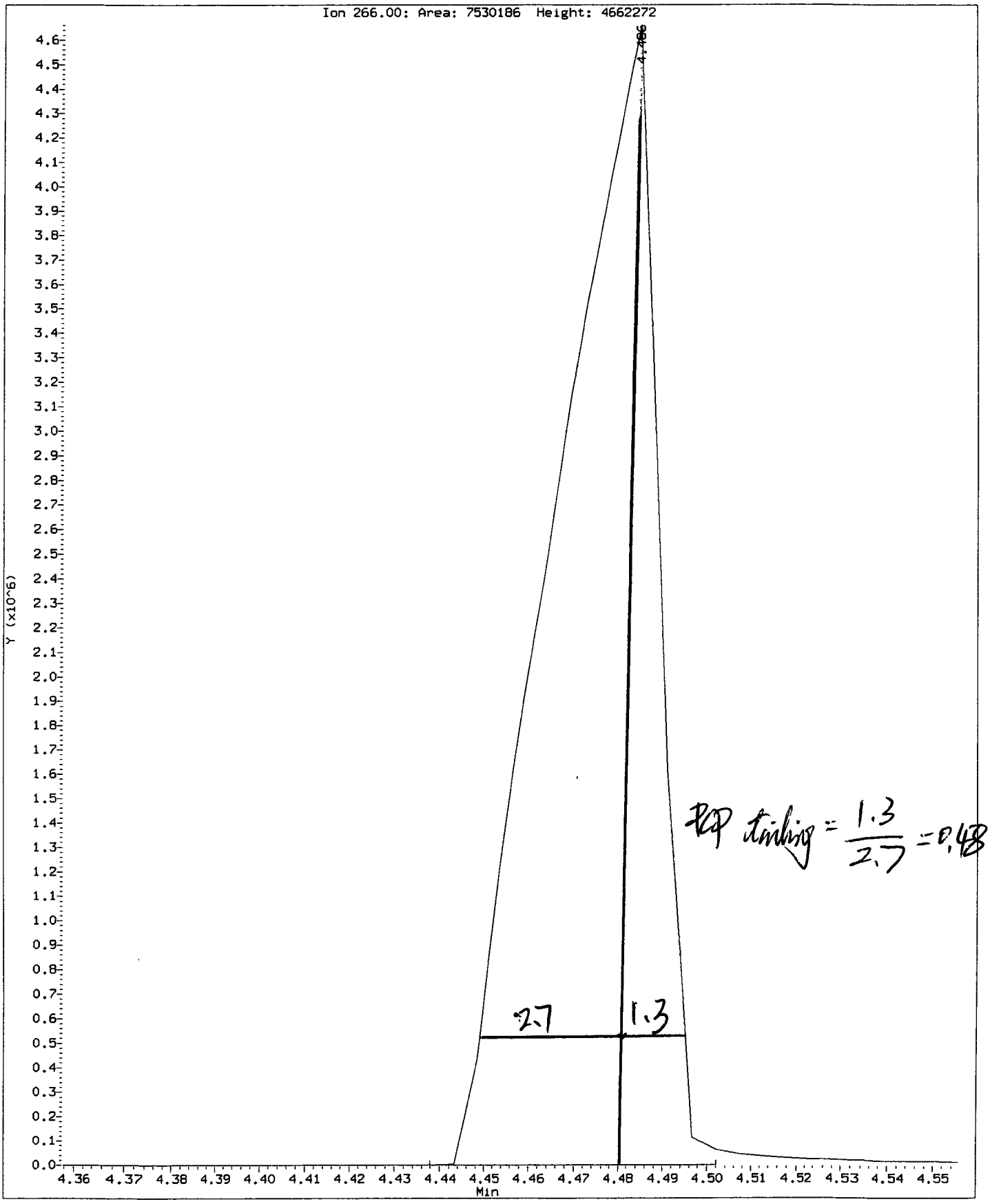
$$\text{DDT Percent Breakdown} = \frac{(\ 9809 + 65764) * 100}{(\ 9809 + 65764 + 2868447)}$$

DDT Percent Breakdown = 2.6 %

11/16/12

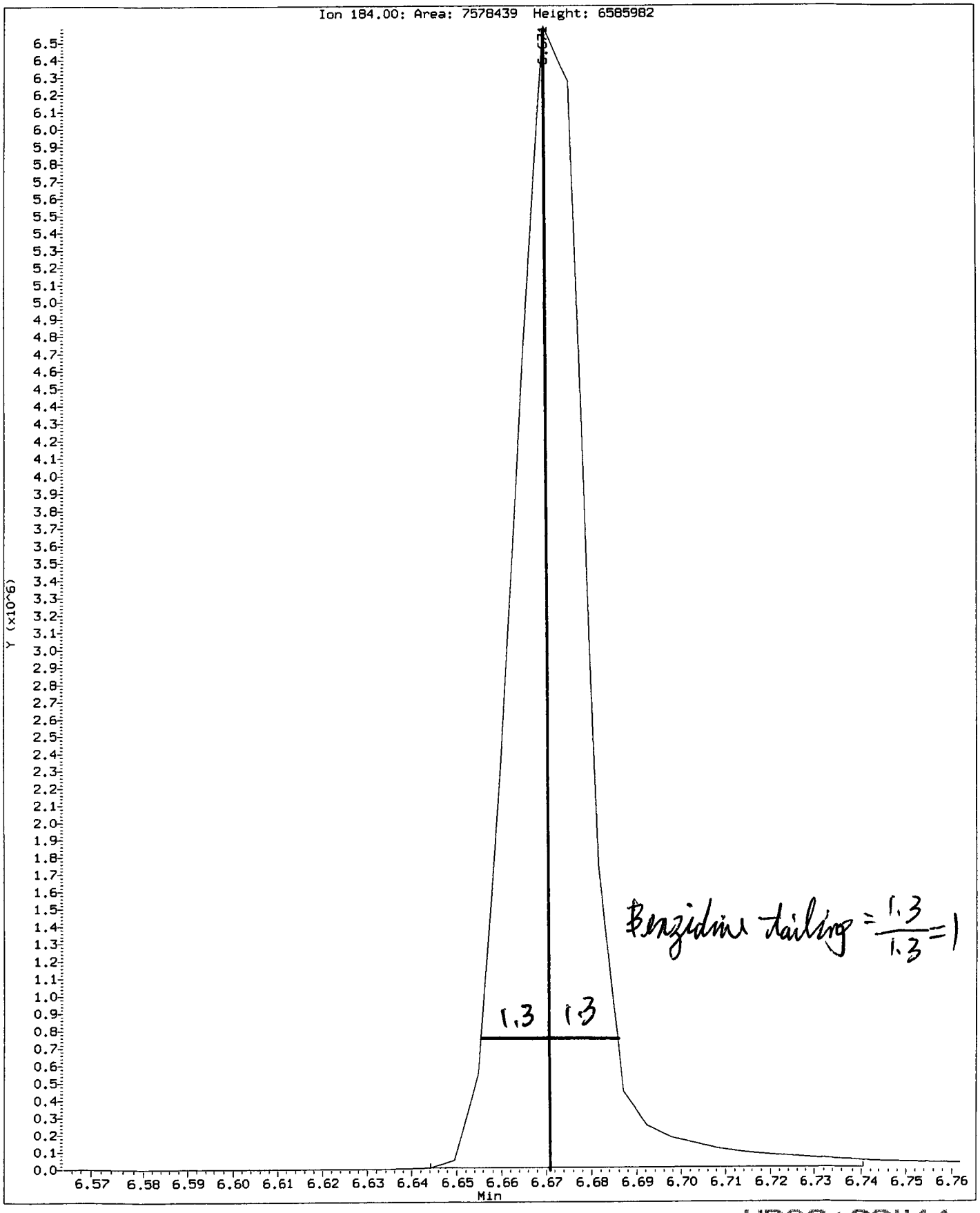
Data File: /chem3/nt11.i/20121115.b/ddt.b/11151201.d
Injection Date: 15-NOV-2012 17:33
Instrument: nt11.i
Client Sample ID: DDT1115

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt11.i/20121115.b/ddt.b/11151201.d
Injection Date: 15-NOV-2012 17:33
Instrument: nt11.i
Client Sample ID: DDT1115

Compound: Benzidine
CAS Number:



VDRQ : 00011

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121115.b/11151203.d
Lab Smp Id: IC011115 Client Smp ID: IC011115
Inj Date : 15-NOV-2012 19:24
Operator : JZ Inst ID: nt11.i
Smp Info : IC011115,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Meth Date : 16-Nov-2012 09:06 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 19:24 Cal File: 11151203.d
Als bottle: 3 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NEWSIMPNAICL.sub
Target Version: 3.50

11/16/12

AMOUNTS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 6 Naphthalene-d8	136	5.470	5.470	(1.000)	525648	2.00000	
7 Naphthalene	128	5.501	5.498	(1.006)	32725	0.10000	0.1094
$ 12 2-Methylnaphthalene-d10	152	6.205	6.205	(1.134)	20550	0.10000	0.1074
14 2-Methylnaphthalene	141	6.252	6.252	(1.143)	17132	0.10000	0.1045
15 1-methylnaphthalene	141	6.445	6.445	(1.178)	17543	0.10000	0.1083
19 Biphenyl	154	6.912	6.912	(0.893)	23628	0.10000	0.1087
20 2,6-Dimethylnaphthalene	156	6.956	6.953	(0.898)	16580	0.10000	0.1071
21 Acenaphthylene	152	7.631	7.631	(0.986)	25027	0.10000	0.09993
* 22 Acenaphthene-d10	164	7.742	7.742	(1.000)	281168	2.00000	
23 Acenaphthene	153	7.789	7.792	(1.006)	18487	0.10000	0.1104
11 Dibenzofuran	168	7.941	7.941	(1.026)	26491	0.10000	0.1087
24 1,6,7-Trimethylnaphthalene	170	8.013	8.016	(1.035)	16137	0.10000	0.1081
25 Fluorene	166	8.414	8.414	(1.087)	18569	0.10000	0.1026
27 Dibenzothiophene	184	9.635	9.635	(0.987)	24700	0.10000	0.1080
* 28 Phenanthrene-d10	188	9.761	9.761	(1.000)	400894	2.00000	
30 Phenanthrene	178	9.796	9.796	(1.004)	28549	0.10000	0.1102
31 Anthracene	178	9.834	9.834	(1.007)	24684	0.10000	0.1027
26 Carbazole	167	10.345	10.345	(1.060)	26313	0.10000	0.1053
33 1-Methylphenanthrene	192	10.544	10.544	(1.080)	18820	0.10000	0.1041
36 Fluoranthene	202	11.453	11.453	(1.173)	26293	0.10000	0.1043
$ 253 Fluoranthene-d10	212	11.418	11.418	(1.170)	24516	0.10000	0.1032
39 Pyrene	202	11.920	11.920	(0.829)	27033	0.10000	0.1044
46 Benzo(a)anthracene	228	14.255	14.255	(0.992)	25596	0.10000	0.1077
* 47 Chrysene-d12	240	14.375	14.378	(1.000)	450177	2.00000	
48 Chrysene	228	14.447	14.444	(1.005)	25959	0.10000	0.1104
51 Benzo(b)fluoranthene	252	16.890	16.893	(0.931)	20540	0.10000	0.1031
52 Benzo(k)fluoranthene	252	16.947	16.950	(0.934)	22727	0.10000	0.1025

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	251 Benzo(j)fluoranthene	252	17.022	17.022	(0.939)	24068	0.10000	0.1043 (M)
	55 Benzo(e)pyrene	252	17.786	17.780	(0.981)	22235	0.10000	0.1053
	54 Benzo(a)pyrene	252	17.900	17.906	(0.987)	19031	0.10000	0.09688
*	56 Perylene-d12	264	18.136	18.139	(1.000)	421899	2.00000	
	57 Perylene	252	18.206	18.209	(1.004)	23442	0.10000	0.1077
$	60 Dibenzo(a,h)anthracene-d14	292	20.364	20.367	(1.123)	10934	0.10000	0.08388 (M)
	63 Indeno(1,2,3-cd)pyrene	276	20.453	20.459	(1.128)	20982	0.10000	0.08966
	62 Dibenzo(a,h)anthracene	278	20.453	20.459	(1.128)	17223	0.10000	0.09023
	61 Benzo(g,h,i)perylene	276	21.339	21.333	(1.177)	19038	0.10000	0.09638

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11151203.d
Lab Smp Id: IC011115
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Misc Info: 12-

Calibration Date: 15-NOV-2012
Calibration Time: 18:53
Client Smp ID: IC011115
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	525648	1.85
22 Acenaphthene-d10	284255	142128	568510	281168	-1.09
28 Phenanthrene-d10	410660	205330	821320	400894	-2.38
47 Chrysene-d12	467886	233943	935772	450177	-3.78
56 Perylene-d12	472330	236165	944660	421899	-10.68

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.47	4.97	5.97	5.47	-0.06
22 Acenaphthene-d10	7.74	7.24	8.24	7.74	-0.04
28 Phenanthrene-d10	9.76	9.26	10.26	9.76	0.00
47 Chrysene-d12	14.38	13.88	14.88	14.37	-0.04
56 Perylene-d12	18.14	17.64	18.64	18.14	-0.03

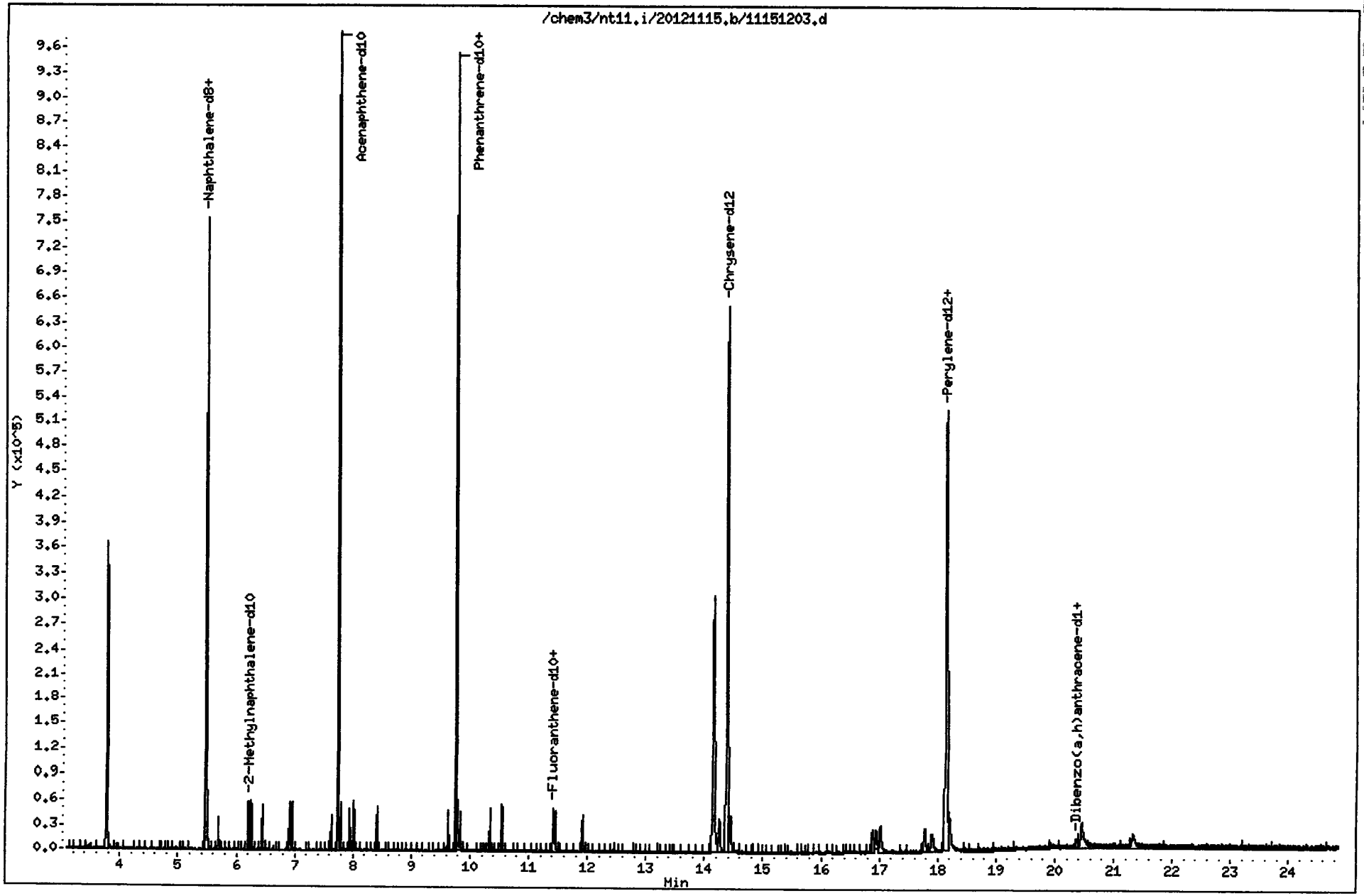
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt11.i/20121115.b/11151203.d
Date : 15-NOV-2012 19:24
Client ID: IC011115
Sample Info: IC011115,

Instrument: nt11.i

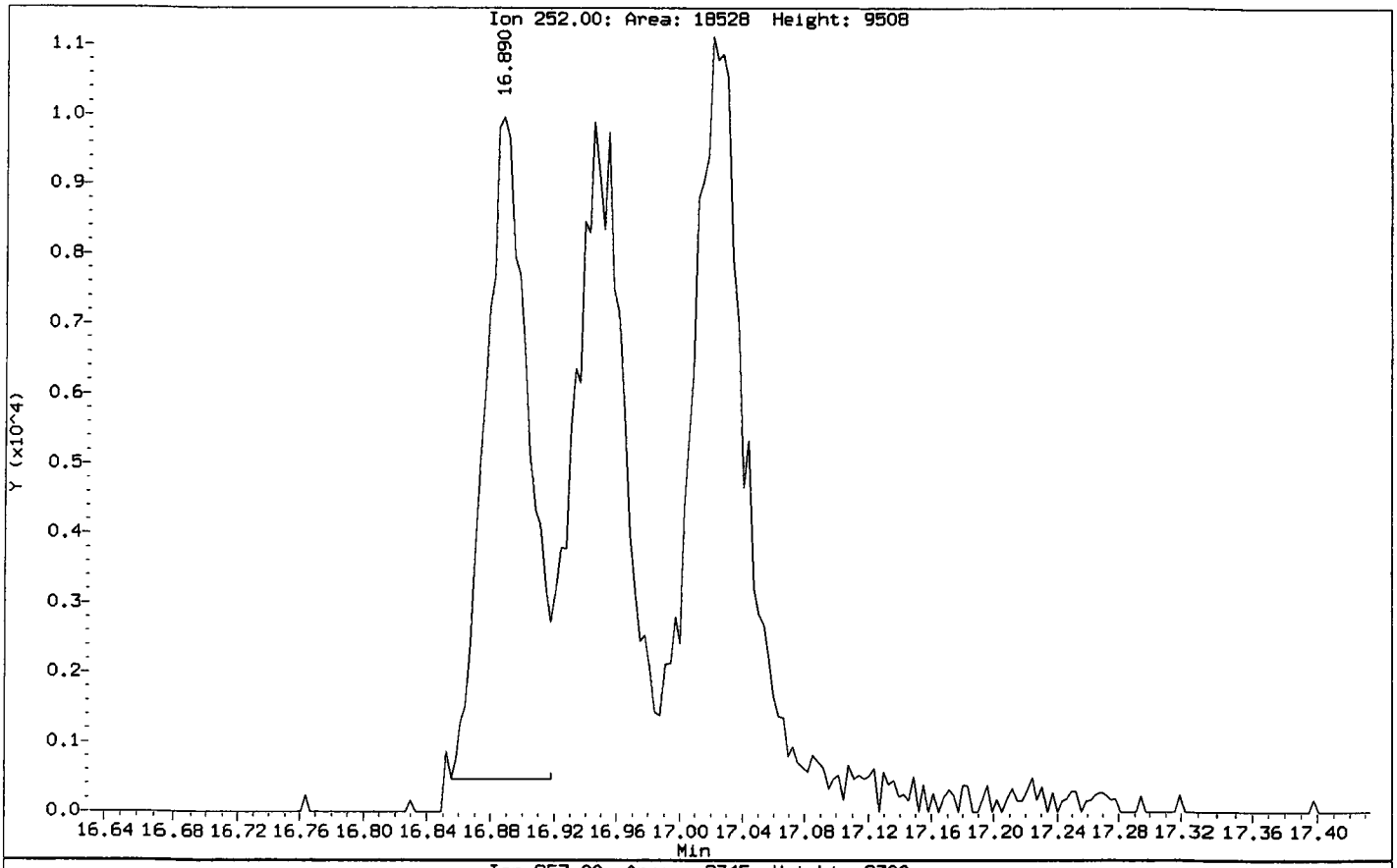
Operator: JZ
Column diameter: 0.25

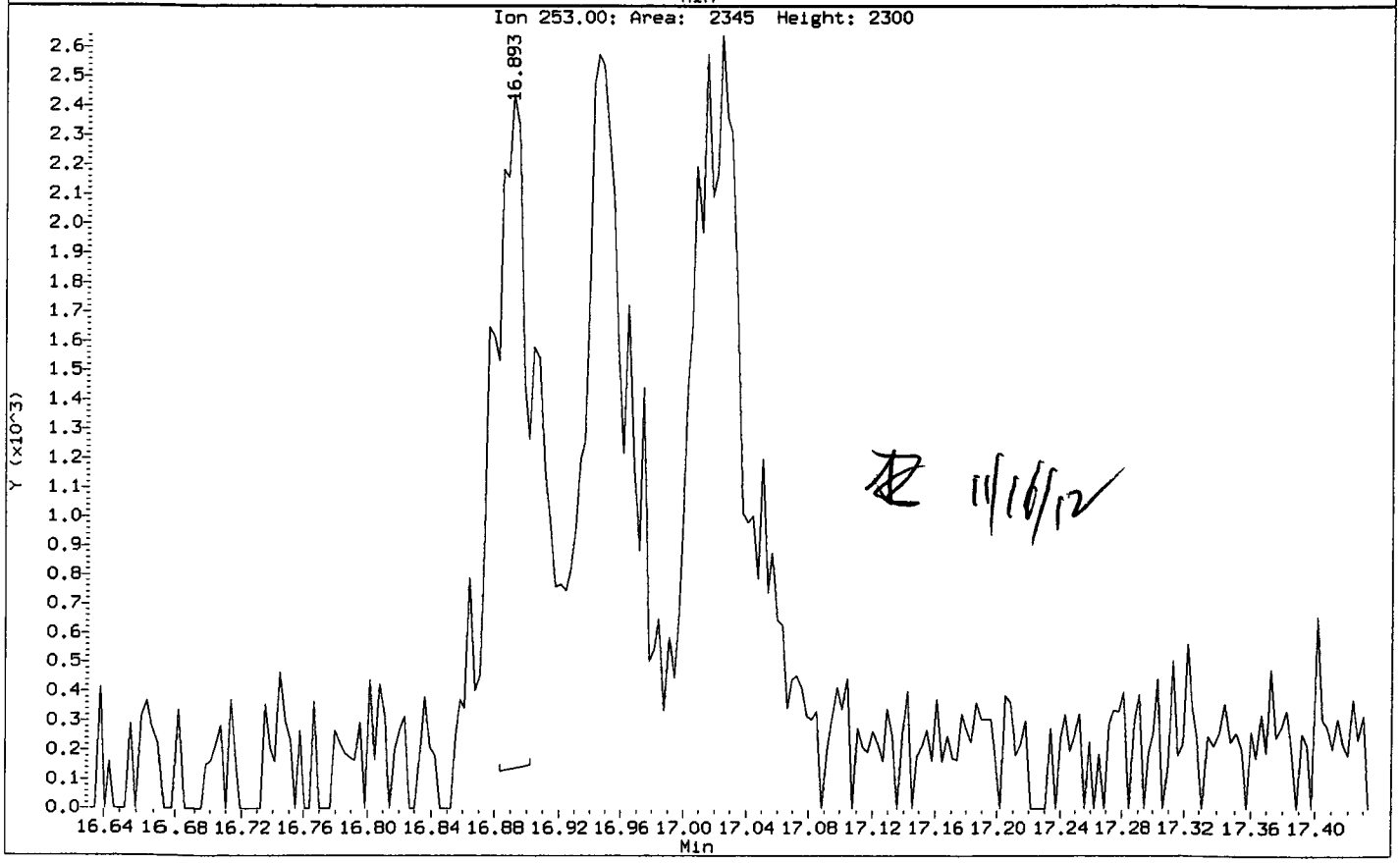
Column phase: ZB-5msi



Data File: /chem3/nt11.i/20121115.b/11151203.d
Injection Date: 15-NOV-2012 19:24
Instrument: nt11.i
Client Sample ID: IC011115

Compound: Benzo(j)fluoranthene
CAS Number:

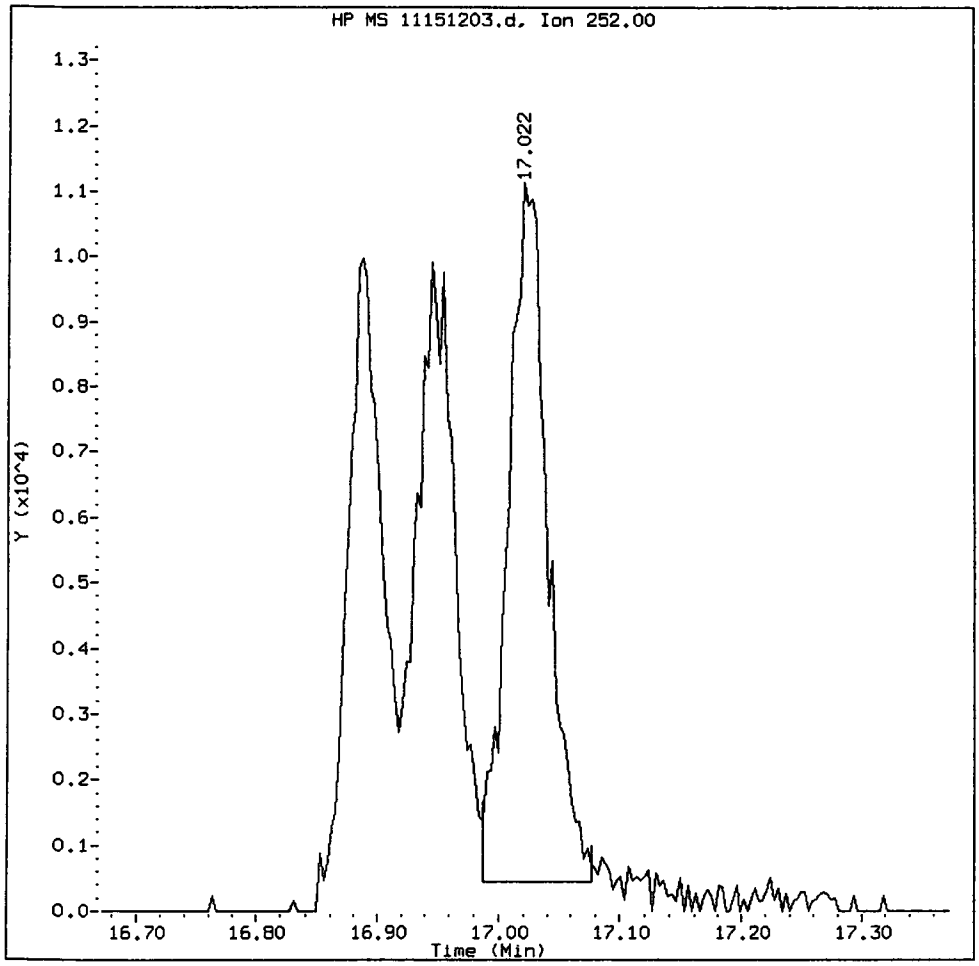




11/16/12

IC011115, /chem3/nt11.i/20121115.b/11151203.d

Benzo(j)fluoranthene Amount: 0.10 Area: 24068



MANUAL INTEGRATION for Benzo(j)fluoranthene

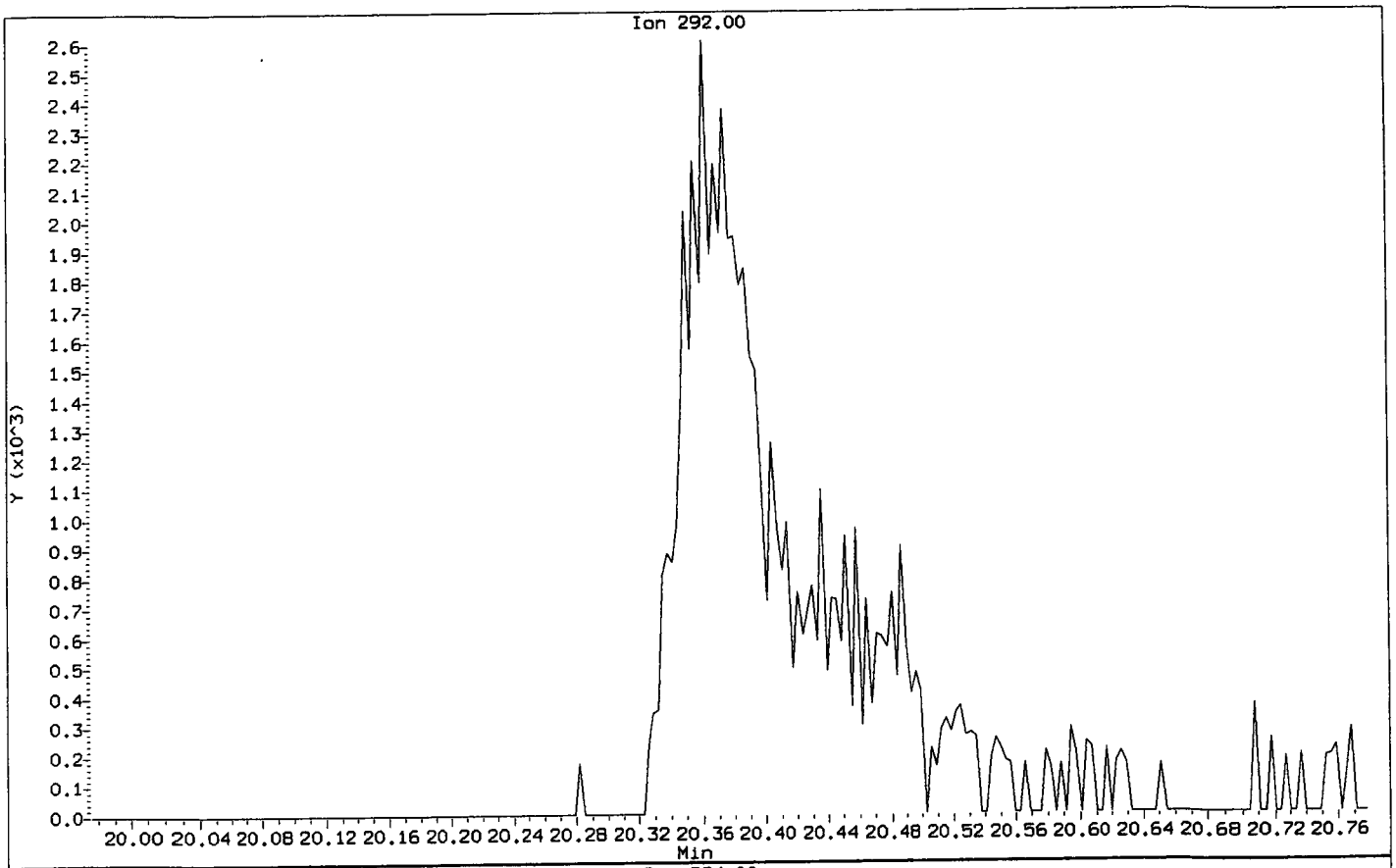
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

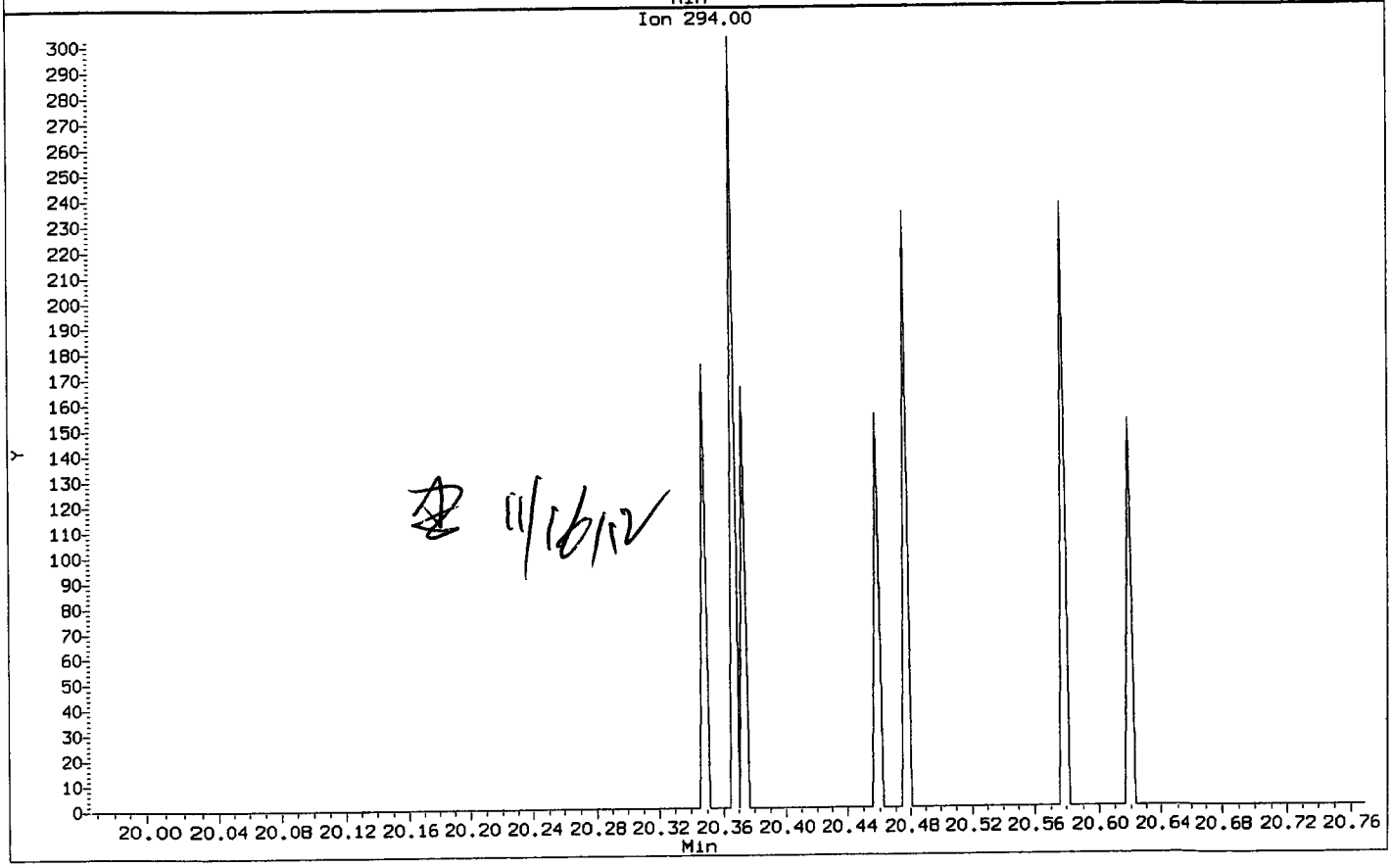
5. Other _____

Analyst: _____ Date: 1/16/12

Data File: /chem3/nt11.i/20121115.b/11151203.d
Injection Date: 15-NOV-2012 19:24
Instrument: nt11.i
Client Sample ID: IC011115

Compound: Dibenzo(a,h)anthracene-d14
CAS Number:

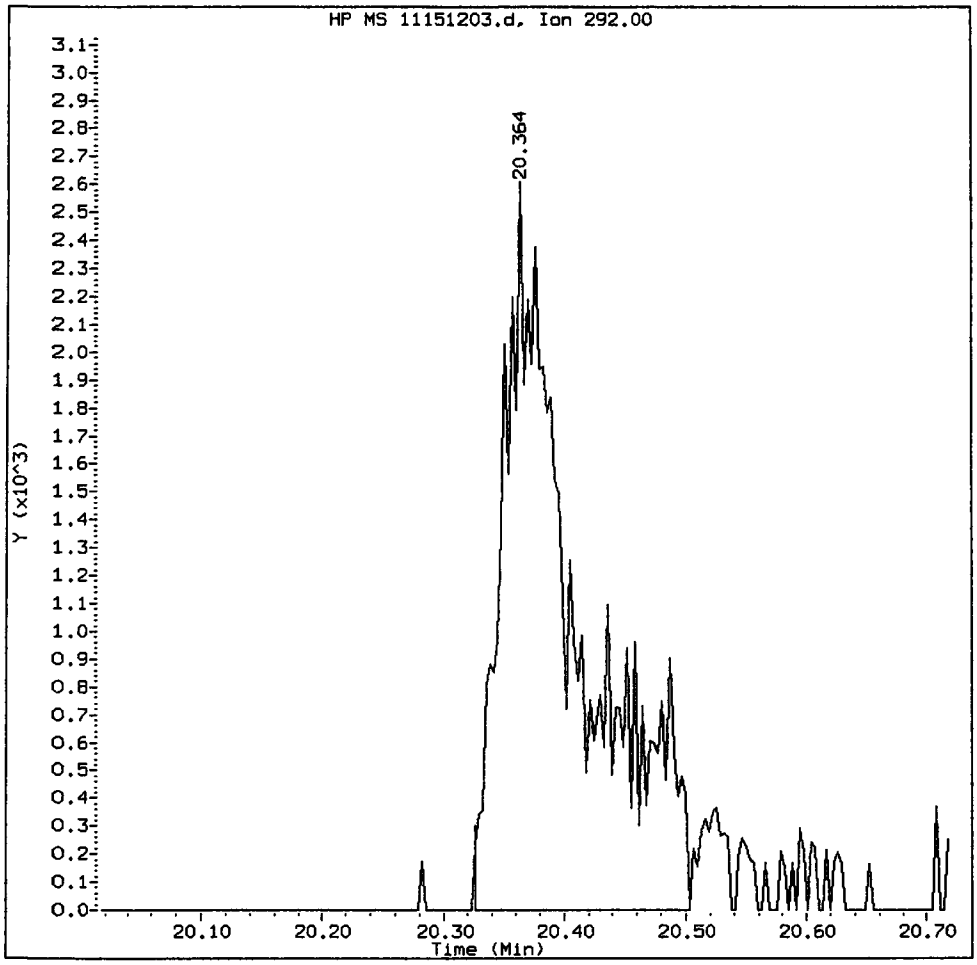




11/16/12

IC011115, /chem3/nt11.i/20121115.b/11151203.d

Dibenzo(a,h)anthracene-d14 Amount: 0.08 Area: 10934



MANUAL INTEGRATION for Dibenzo(a,h)anthracene-d14

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 11/16/12

CO-ELUTION SUMMARY FOR FILE - 11151203.d

Lab ID: IC011115, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 15-NOV-2

RT	CO-ELUTION COMPOUNDS
20.453	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
20.453	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

checked OK

11/16/12

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121115.b/11151204.d
Lab Smp Id: IC051115 Client Smp ID: IC051115
Inj Date : 15-NOV-2012 19:54
Operator : JZ Inst ID: nt11.i
Smp Info : IC051115,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Meth Date : 16-Nov-2012 09:06 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 19:54 Cal File: 11151204.d
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NEWSIMPNAICL.sub
Target Version: 3.50

11/16/12

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	6 Naphthalene-d8	136	5.470	5.470	(1.000)	502178	2.00000	
	7 Naphthalene	128	5.498	5.498	(1.005)	146246	0.50000	0.5449
$	12 2-Methylnaphthalene-d10	152	6.205	6.205	(1.134)	93847	0.50000	0.5470
	14 2-Methylnaphthalene	141	6.252	6.252	(1.143)	82360	0.50000	0.5447
	15 1-methylnaphthalene	141	6.445	6.445	(1.178)	77781	0.50000	0.5370
	19 Biphenyl	154	6.912	6.912	(0.893)	109708	0.50000	0.5553
	20 2,6-Dimethylnaphthalene	156	6.953	6.953	(0.898)	77230	0.50000	0.5487
	21 Acenaphthylene	152	7.631	7.631	(0.986)	124528	0.50000	0.5258
*	22 Acenaphthene-d10	164	7.742	7.742	(1.000)	272531	2.00000	
	23 Acenaphthene	153	7.789	7.792	(1.006)	82681	0.50000	0.5490
	11 Dibenzofuran	168	7.941	7.941	(1.026)	122886	0.50000	0.5570
	24 1,6,7-Trimethylnaphthalene	170	8.016	8.016	(1.035)	76864	0.50000	0.5629
	25 Fluorene	166	8.417	8.414	(1.087)	93768	0.50000	0.5530
	27 Dibenzothiophene	184	9.632	9.635	(0.987)	117165	0.50000	0.5524
*	28 Phenanthrene-d10	188	9.761	9.761	(1.000)	391251	2.00000	
	30 Phenanthrene	178	9.796	9.796	(1.004)	129116	0.50000	0.5463
	31 Anthracene	178	9.834	9.834	(1.007)	122291	0.50000	0.5390
	26 Carbazole	167	10.345	10.345	(1.060)	126266	0.50000	0.5401
	33 1-Methylphenanthrene	192	10.544	10.544	(1.080)	93279	0.50000	0.5489
	36 Fluoranthene	202	11.450	11.453	(1.173)	129566	0.50000	0.5472
$	253 Fluoranthene-d10	212	11.418	11.418	(1.170)	119356	0.50000	0.5344
	39 Pyrene	202	11.920	11.920	(0.829)	132676	0.50000	0.5316
	46 Benzo(a)anthracene	228	14.255	14.255	(0.991)	119918	0.50000	0.5270
*	47 Chrysene-d12	240	14.378	14.378	(1.000)	452865	2.00000	
	48 Chrysene	228	14.444	14.444	(1.005)	118406	0.50000	0.5361
	51 Benzo(b)fluoranthene	252	16.887	16.893	(0.931)	105243	0.50000	0.5142
	52 Benzo(k)fluoranthene	252	16.947	16.950	(0.934)	114001	0.50000	0.5129

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
251	Benzo(j)fluoranthene	252	17.022	17.022	(0.939)	122241	0.50000	0.5212
55	Benzo(e)pyrene	252	17.780	17.780	(0.980)	115621	0.50000	0.5443
54	Benzo(a)pyrene	252	17.906	17.906	(0.987)	111047	0.50000	0.5342
* 56	Perylene-d12	264	18.136	18.139	(1.000)	442240	2.00000	
57	Perylene	252	18.206	18.209	(1.004)	114699	0.50000	0.5320
$ 60	Dibenzo(a,h)anthracene-d14	292	20.364	20.367	(1.123)	69427	0.50000	0.4832 (M)
63	Indeno(1,2,3-cd)pyrene	276	20.456	20.459	(1.128)	126692	0.50000	0.5027
62	Dibenzo(a,h)anthracene	278	20.459	20.459	(1.128)	102864	0.50000	0.5011
61	Benzo(g,h,i)perylene	276	21.330	21.333	(1.176)	106268	0.50000	0.4956

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11151204.d
Lab Smp Id: IC051115
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Misc Info: 12-

Calibration Date: 15-NOV-2012
Calibration Time: 18:53
Client Smp ID: IC051115
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	502178	-2.70
22 Acenaphthene-d10	284255	142128	568510	272531	-4.12
28 Phenanthrene-d10	410660	205330	821320	391251	-4.73
47 Chrysene-d12	467886	233943	935772	452865	-3.21
56 Perylene-d12	472330	236165	944660	442240	-6.37

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.47	4.97	5.97	5.47	-0.06
22 Acenaphthene-d10	7.74	7.24	8.24	7.74	-0.04
28 Phenanthrene-d10	9.76	9.26	10.26	9.76	0.00
47 Chrysene-d12	14.38	13.88	14.88	14.38	-0.02
56 Perylene-d12	18.14	17.64	18.64	18.14	-0.03

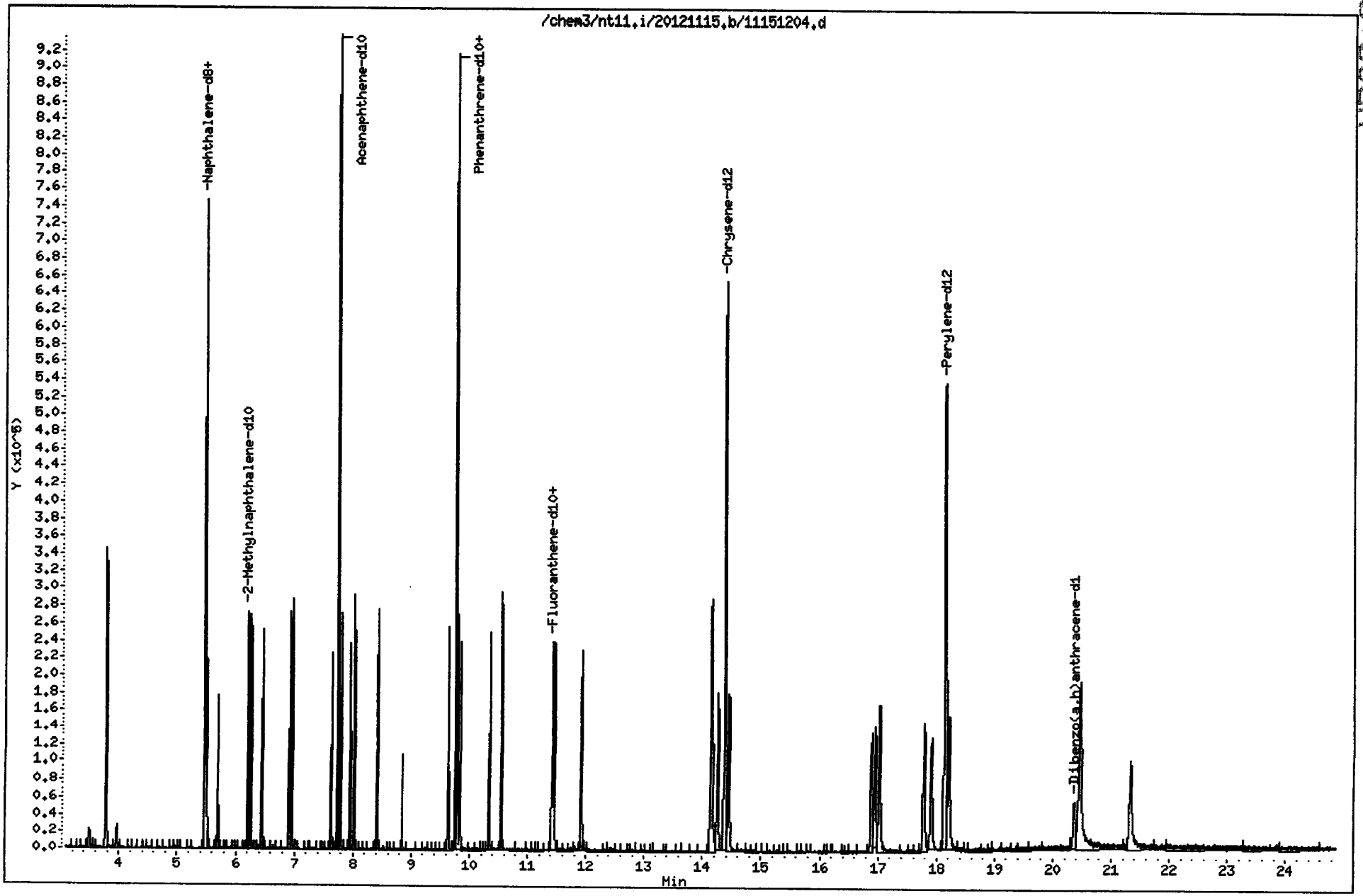
AREA UPPER LIMIT = +100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = + 0.50 minutes of internal standard RT.
RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

Data File: /chem3/nt11.i/20121115.b/11151204.d
Date : 15-NOV-2012 19:54
Client ID: IC051115
Sample Info: IC051115,

Column phase: ZB-5msi

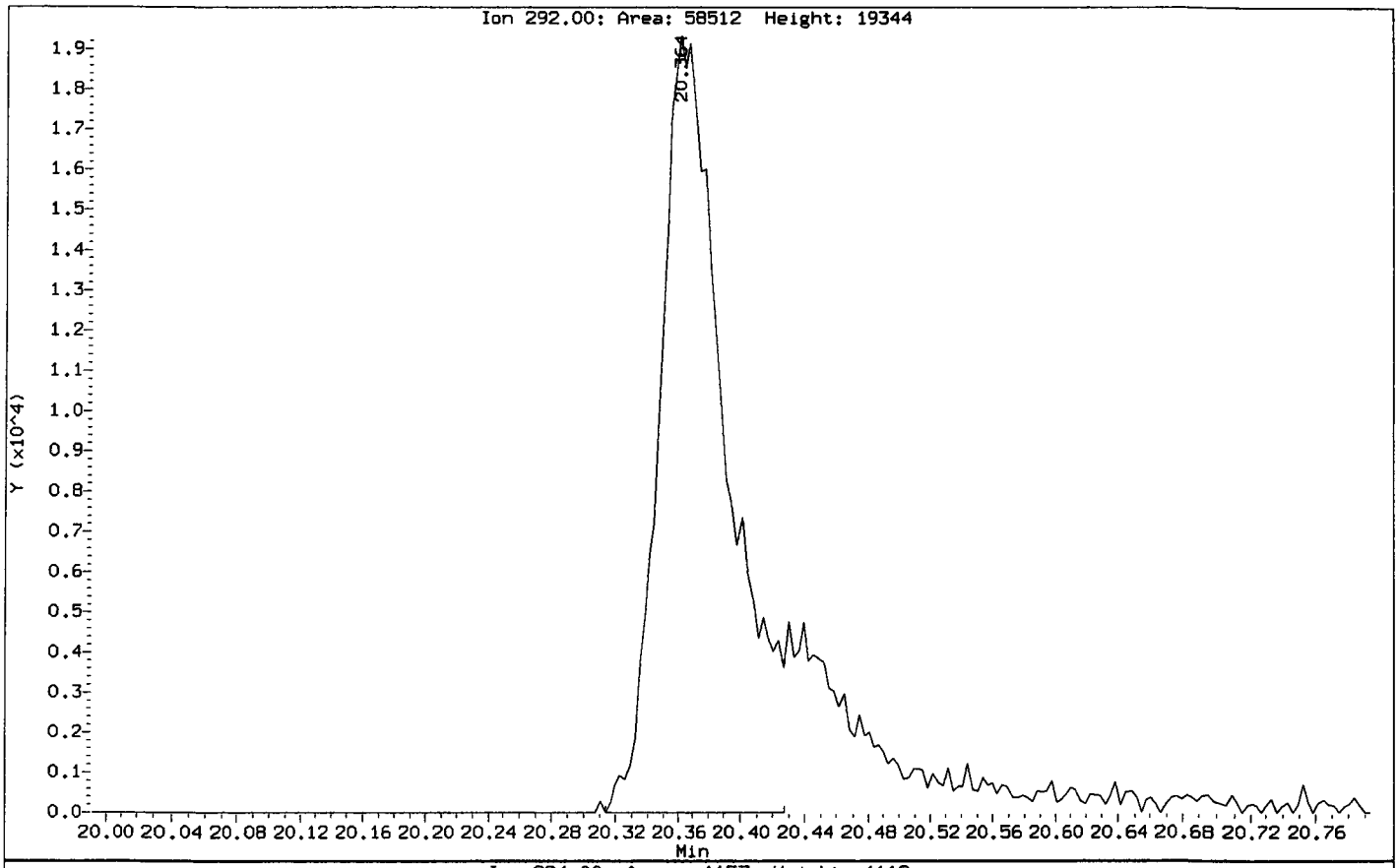
Instrument: nt11.i

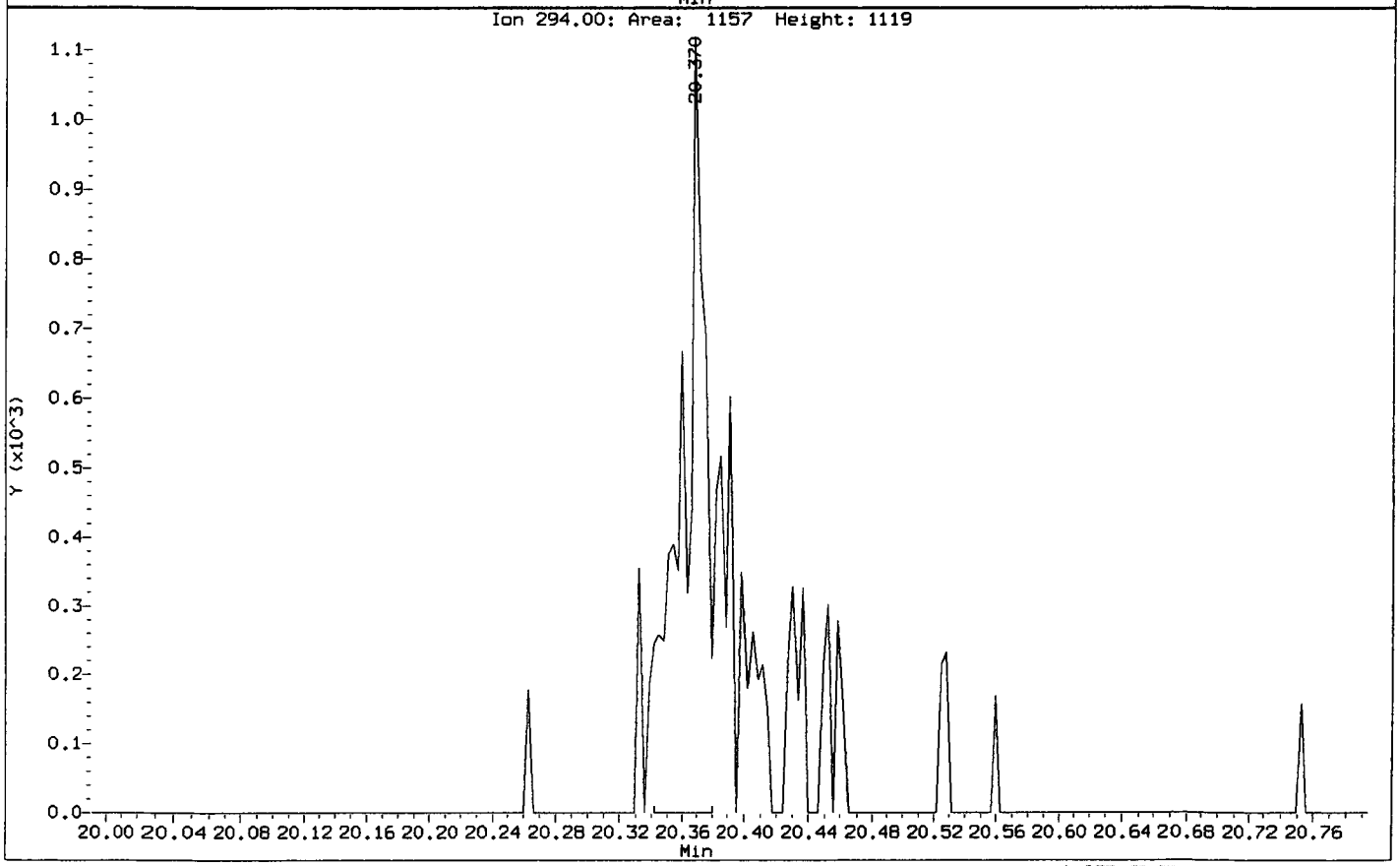
Operator: JZ
Column diameter: 0.25



Data File: /chem3/nt11.i/20121115.b/11151204.d
Injection Date: 15-NOV-2012 19:54
Instrument: nt11.i
Client Sample ID: ICO51115

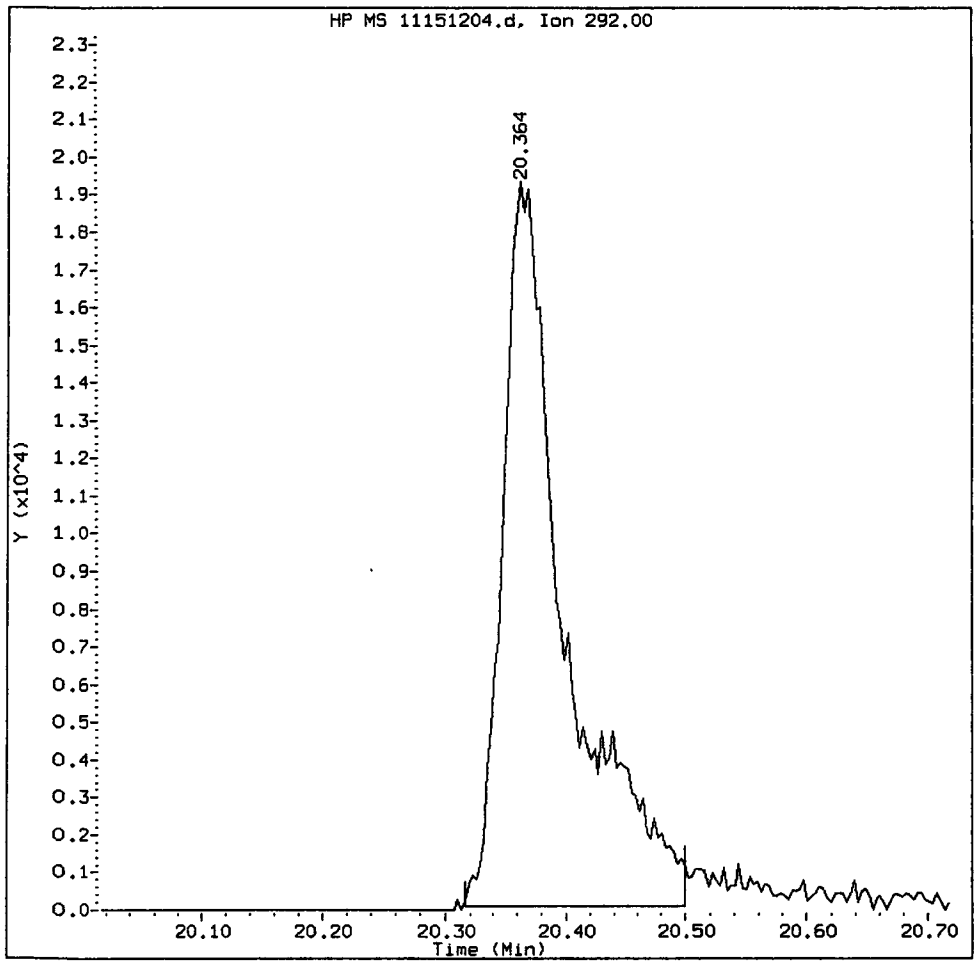
Compound: Dibenzo(a,h)anthracene-d14
CAS Number:





IC051115, /chem3/nt11.i/20121115.b/11151204.d

Dibenzo(a,h)anthracene-d14 Amount: 0.48 Area: 69427



MANUAL INTEGRATION for Dibenzo(a,h)anthracene-d14

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 11/16/12

CO-ELUTION SUMMARY FOR FILE - 11151204.d

Lab ID: IC051115, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 15-NOV-2

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121115.b/11151205.d
Lab Smp Id: IC11115 Client Smp ID: IC11115
Inj Date : 15-NOV-2012 20:24
Operator : JZ Inst ID: nt11.i
Smp Info : IC11115,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Meth Date : 16-Nov-2012 09:06 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 20:24 Cal File: 11151205.d
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NEWSIMPNAICL.sub
Target Version: 3.50

11/16/12

AMOUNTS

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	6 Naphthalene-d8	136	5.470	5.470	(1.000)	543154	2.00000	
	7 Naphthalene	128	5.498	5.498	(1.005)	288619	1.00000	0.9943
$	12 2-Methylnaphthalene-d10	152	6.205	6.205	(1.134)	185278	1.00000	0.9984
	14 2-Methylnaphthalene	141	6.252	6.252	(1.143)	166046	1.00000	1.015
	15 1-methylnaphthalene	141	6.445	6.445	(1.178)	154308	1.00000	0.9850
	19 Biphenyl	154	6.912	6.912	(0.893)	215670	1.00000	0.9936
	20 2,6-Dimethylnaphthalene	156	6.953	6.953	(0.898)	151954	1.00000	0.9826
	21 Acenaphthylene	152	7.631	7.631	(0.986)	259571	1.00000	0.9977
*	22 Acenaphthene-d10	164	7.742	7.742	(1.000)	299409	2.00000	
	23 Acenaphthene	153	7.792	7.792	(1.007)	163028	1.00000	0.9853
	11 Dibenzofuran	168	7.941	7.941	(1.026)	238577	1.00000	0.9843
	24 1,6,7-Trimethylnaphthalene	170	8.016	8.016	(1.035)	148936	1.00000	0.9929
	25 Fluorene	166	8.414	8.414	(1.087)	185883	1.00000	0.9978
	27 Dibenzothiophene	184	9.635	9.635	(0.987)	231583	1.00000	1.010
*	28 Phenanthrene-d10	188	9.761	9.761	(1.000)	422941	2.00000	
	30 Phenanthrene	178	9.796	9.796	(1.004)	260184	1.00000	1.018
	31 Anthracene	178	9.834	9.834	(1.007)	246870	1.00000	1.007
	26 Carbazole	167	10.345	10.345	(1.060)	253940	1.00000	1.005
	33 1-Methylphenanthrene	192	10.544	10.544	(1.080)	186145	1.00000	1.013
	36 Fluoranthene	202	11.453	11.453	(1.173)	259718	1.00000	1.015
$	253 Fluoranthene-d10	212	11.418	11.418	(1.170)	239766	1.00000	0.9930
	39 Pyrene	202	11.920	11.920	(0.829)	264352	1.00000	1.000
	46 Benzo(a)anthracene	228	14.255	14.255	(0.991)	241343	1.00000	1.001
*	47 Chrysene-d12	240	14.378	14.378	(1.000)	479647	2.00000	
	48 Chrysene	228	14.444	14.444	(1.005)	227801	1.00000	0.9738
	51 Benzo(b)fluoranthene	252	16.893	16.893	(0.931)	222043	1.00000	1.006
	52 Benzo(k)fluoranthene	252	16.950	16.950	(0.934)	237598	1.00000	0.9909

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
251	Benzo(j)fluoranthene	252	17.022	17.022	(0.938)	260131	1.00000	1.028
55	Benzo(e)pyrene	252	17.780	17.780	(0.980)	225573	1.00000	0.9844
54	Benzo(a)pyrene	252	17.906	17.906	(0.987)	224896	1.00000	1.003
* 56	Perylene-d12	264	18.139	18.139	(1.000)	477073	2.00000	
57	Perylene	252	18.209	18.209	(1.004)	229020	1.00000	0.9847
$ 60	Dibenzo(a,h)anthracene-d14	292	20.367	20.367	(1.123)	153126	1.00000	0.9682(M)
63	Indeno(1,2,3-cd)pyrene	276	20.459	20.459	(1.128)	273852	1.00000	1.007
62	Dibenzo(a,h)anthracene	278	20.459	20.459	(1.128)	225284	1.00000	1.017
61	Benzo(g,h,i)perylene	276	21.333	21.333	(1.176)	233076	1.00000	1.008

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11151205.d
Lab Smp Id: IC11115
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Misc Info: 12-

Calibration Date: 15-NOV-2012
Calibration Time: 18:53
Client Smp ID: IC11115
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	543154	5.24
22 Acenaphthene-d10	284255	142128	568510	299409	5.33
28 Phenanthrene-d10	410660	205330	821320	422941	2.99
47 Chrysene-d12	467886	233943	935772	479647	2.51
56 Perylene-d12	472330	236165	944660	477073	1.00

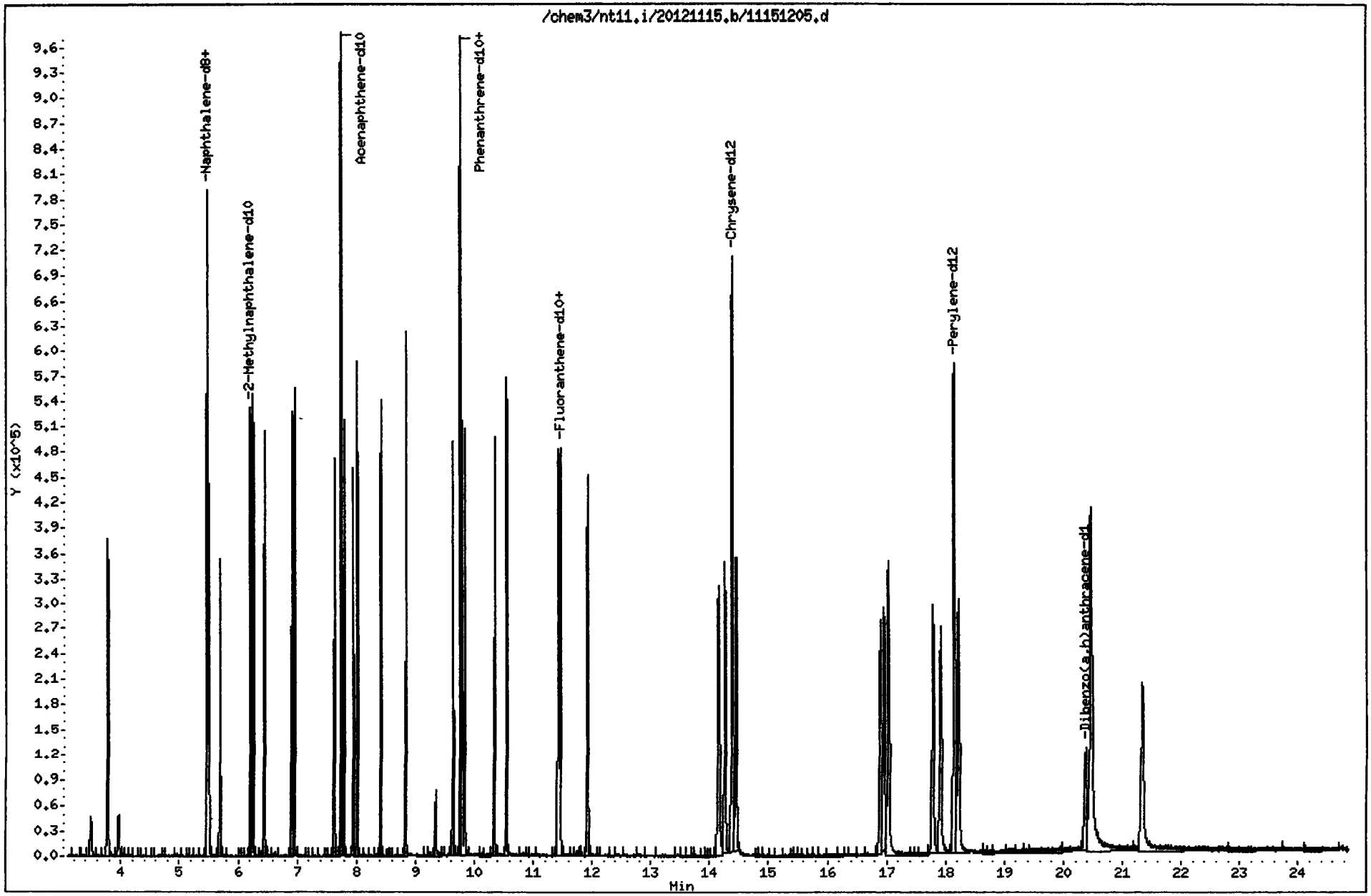
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.47	4.97	5.97	5.47	-0.06
22 Acenaphthene-d10	7.74	7.24	8.24	7.74	-0.04
28 Phenanthrene-d10	9.76	9.26	10.26	9.76	0.00
47 Chrysene-d12	14.38	13.88	14.88	14.38	-0.02
56 Perylene-d12	18.14	17.64	18.64	18.14	-0.02

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

Data File: /chem3/nt11.i/20121115.b/11151205.d
Date : 15-NOV-2012 20:24
Client ID: IC11115
Sample Info: IC11115,

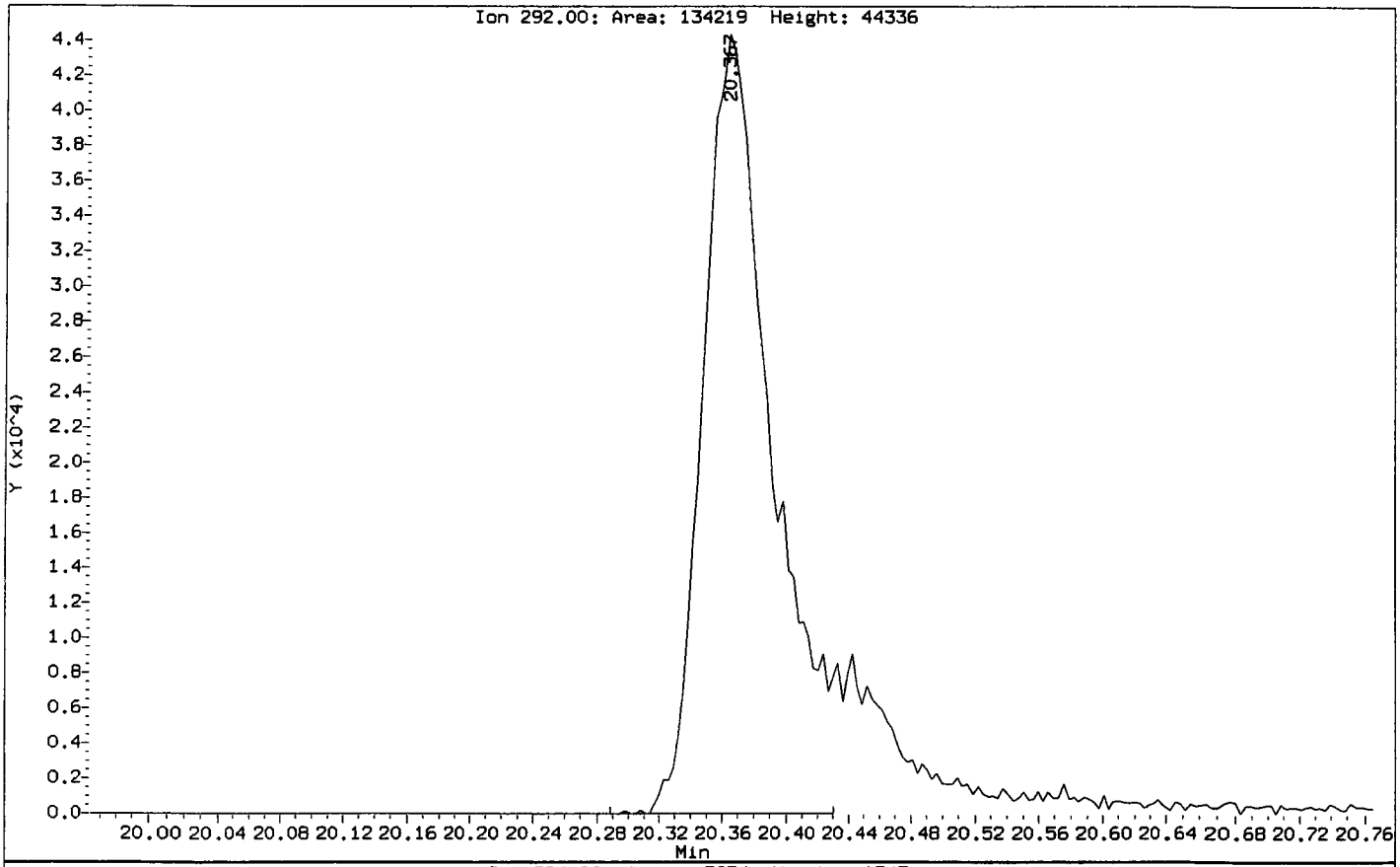
Instrument: nt11.i
Operator: JZ
Column diameter: 0.25

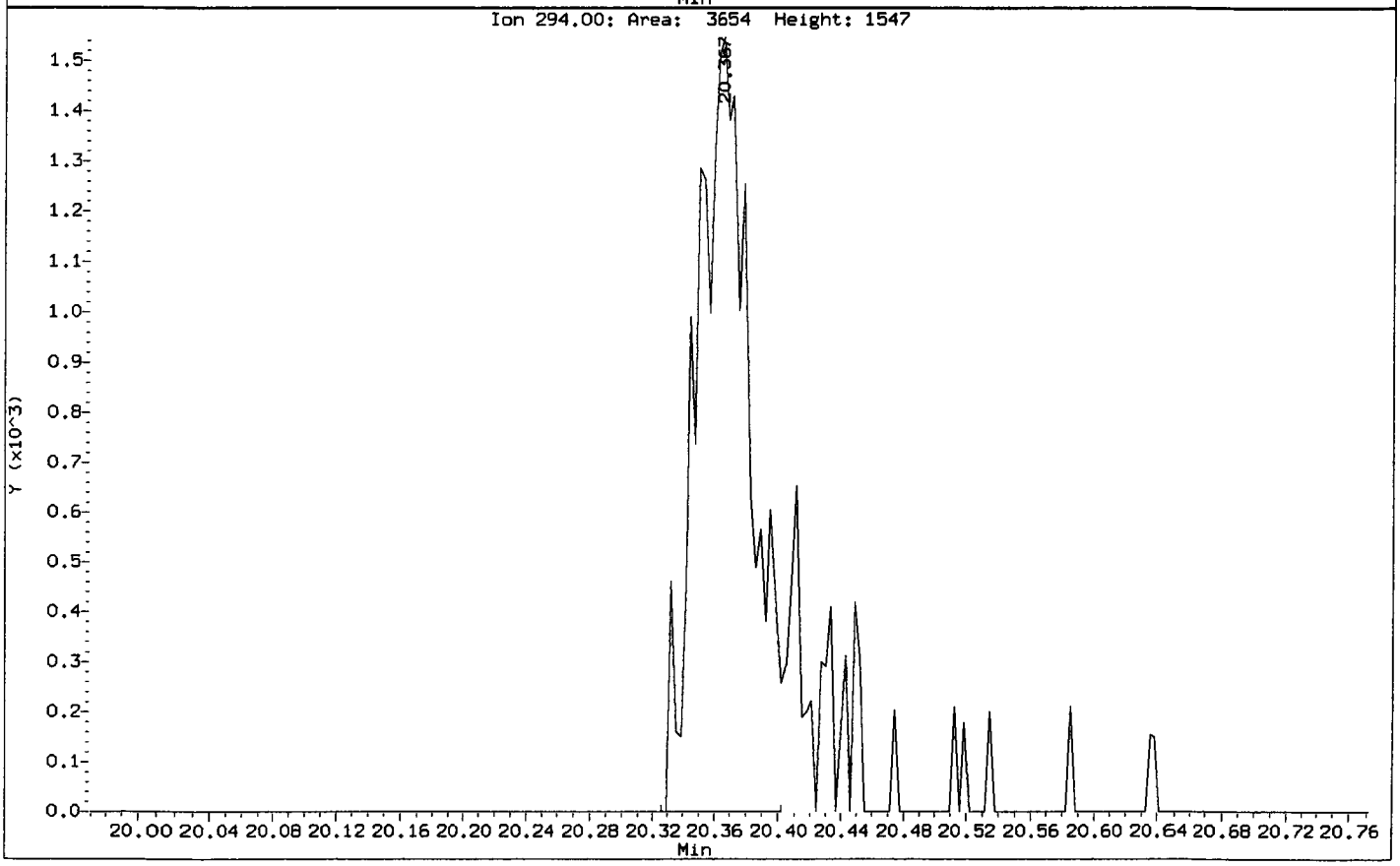
Column phase: ZB-5msi



Data File: /chem3/nt11.i/20121115.b/11151205.d
Injection Date: 15-NOV-2012 20:24
Instrument: nt11.i
Client Sample ID: IC11115

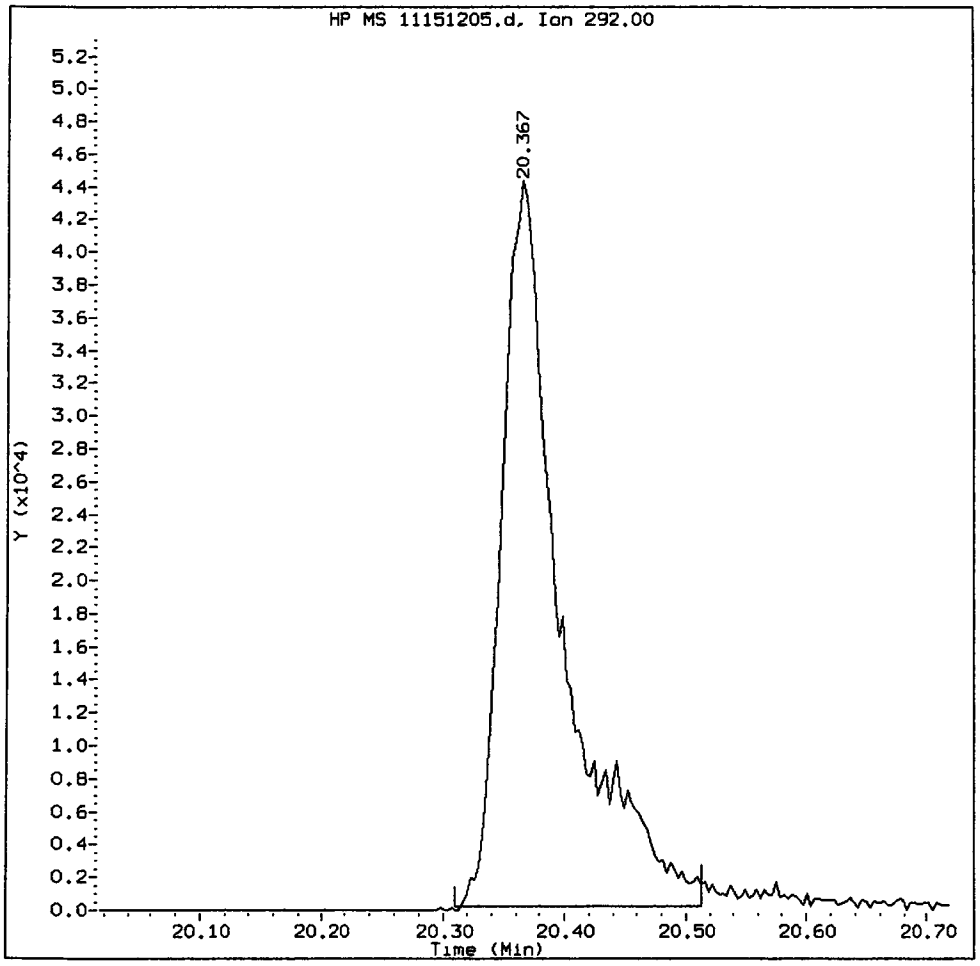
Compound: Dibenzo(a,h)anthracene-d14
CAS Number:





IC11115, /chem3/nt11.i/20121115.b/11151205.d

Dibenzo(a,h)anthracene-d14 Amount: 0.97 Area: 153126



MANUAL INTEGRATION for Dibenzo(a,h)anthracene-d14

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 11/16/12

CO-ELUTION SUMMARY FOR FILE - 11151205.d

Lab ID: IC11115, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 15-NOV-20

RT	CO-ELUTION COMPOUNDS
20.459	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
20.459	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

checked ok

11/16/12

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121115.b/11151202.d
Lab Smp Id: IC251115 Client Smp ID: IC251115
Inj Date : 15-NOV-2012 18:53
Operator : JZ Inst ID: nt11.i
Smp Info : IC251115
Misc Info : 12-
Comment : 1ul Injection
Method : /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Meth Date : 16-Nov-2012 09:06 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 18:53 Cal File: 11151202.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NEWSIMPNAICL.sub
Target Version: 3.50

11/16/12

AMOUNTS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 6 Naphthalene-d8	136	5.473	5.470	(1.000)	516111	2.00000	
7 Naphthalene	128	5.501	5.498	(1.005)	665359	2.50000	2.500
$ 12 2-Methylnaphthalene-d10	152	6.208	6.205	(1.134)	434526	2.50000	2.500
14 2-Methylnaphthalene	141	6.255	6.252	(1.143)	384325	2.50000	2.500
15 1-methylnaphthalene	141	6.448	6.445	(1.178)	364974	2.50000	2.500
19 Biphenyl	154	6.912	6.912	(0.892)	501181	2.50000	2.500
20 2,6-Dimethylnaphthalene	156	6.956	6.953	(0.898)	363477	2.50000	2.500
21 Acenaphthylene	152	7.631	7.631	(0.985)	633403	2.50000	2.500
* 22 Acenaphthene-d10	164	7.745	7.742	(1.000)	284255	2.00000	
23 Acenaphthene	153	7.792	7.792	(1.006)	378991	2.50000	2.500
11 Dibenzofuran	168	7.944	7.941	(1.026)	561948	2.50000	2.500
24 1,6,7-Trimethylnaphthalene	170	8.016	8.016	(1.035)	346698	2.50000	2.500
25 Fluorene	166	8.417	8.414	(1.087)	445757	2.50000	2.500
27 Dibenzothiophene	184	9.635	9.635	(0.987)	538363	2.50000	2.500
* 28 Phenanthrene-d10	188	9.761	9.761	(1.000)	410660	2.00000	
30 Phenanthrene	178	9.799	9.796	(1.004)	595314	2.50000	2.500
31 Anthracene	178	9.840	9.834	(1.008)	598555	2.50000	2.500
26 Carbazole	167	10.348	10.345	(1.060)	605770	2.50000	2.500
33 1-Methylphenanthrene	192	10.547	10.544	(1.080)	444263	2.50000	2.500
36 Fluoranthene	202	11.456	11.453	(1.174)	617430	2.50000	2.500
$ 253 Fluoranthene-d10	212	11.421	11.418	(1.170)	588653	2.50000	2.500
39 Pyrene	202	11.923	11.920	(0.829)	643727	2.50000	2.500
46 Benzo(a)anthracene	228	14.261	14.255	(0.992)	569683	2.50000	2.500
* 47 Chrysene-d12	240	14.381	14.378	(1.000)	467886	2.00000	
48 Chrysene	228	14.451	14.444	(1.005)	547744	2.50000	2.500
51 Benzo(b)fluoranthene	252	16.896	16.893	(0.931)	540283	2.50000	2.500
52 Benzo(k)fluoranthene	252	16.959	16.950	(0.935)	605121	2.50000	2.500

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
251	Benzo(j)fluoranthene	252	17.032	17.022	(0.939)	617649	2.50000	2.500
55	Benzo(e)pyrene	252	17.789	17.780	(0.981)	559230	2.50000	2.500
54	Benzo(a)pyrene	252	17.915	17.906	(0.987)	566951	2.50000	2.500
* 56	Perylene-d12	264	18.143	18.139	(1.000)	472330	2.00000	
57	Perylene	252	18.215	18.209	(1.004)	562082	2.50000	2.500
$ 60	Dibenzo(a,h)anthracene-d14	292	20.377	20.367	(1.123)	423618	2.50000	2.500
63	Indeno(1,2,3-cd)pyrene	276	20.471	20.459	(1.128)	722667	2.50000	2.500
62	Dibenzo(a,h)anthracene	278	20.468	20.459	(1.128)	586489	2.50000	2.500
61	Benzo(g,h,i)perylene	276	21.342	21.333	(1.176)	572831	2.50000	2.500 (M)

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11151202.d
Lab Smp Id: IC251115
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Misc Info: 12-

Calibration Date: 15-NOV-2012
Calibration Time: 18:53
Client Smp ID: IC251115
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	516111	0.00
22 Acenaphthene-d10	284255	142128	568510	284255	0.00
28 Phenanthrene-d10	410660	205330	821320	410660	0.00
47 Chrysene-d12	467886	233943	935772	467886	0.00
56 Perylene-d12	472330	236165	944660	472330	0.00

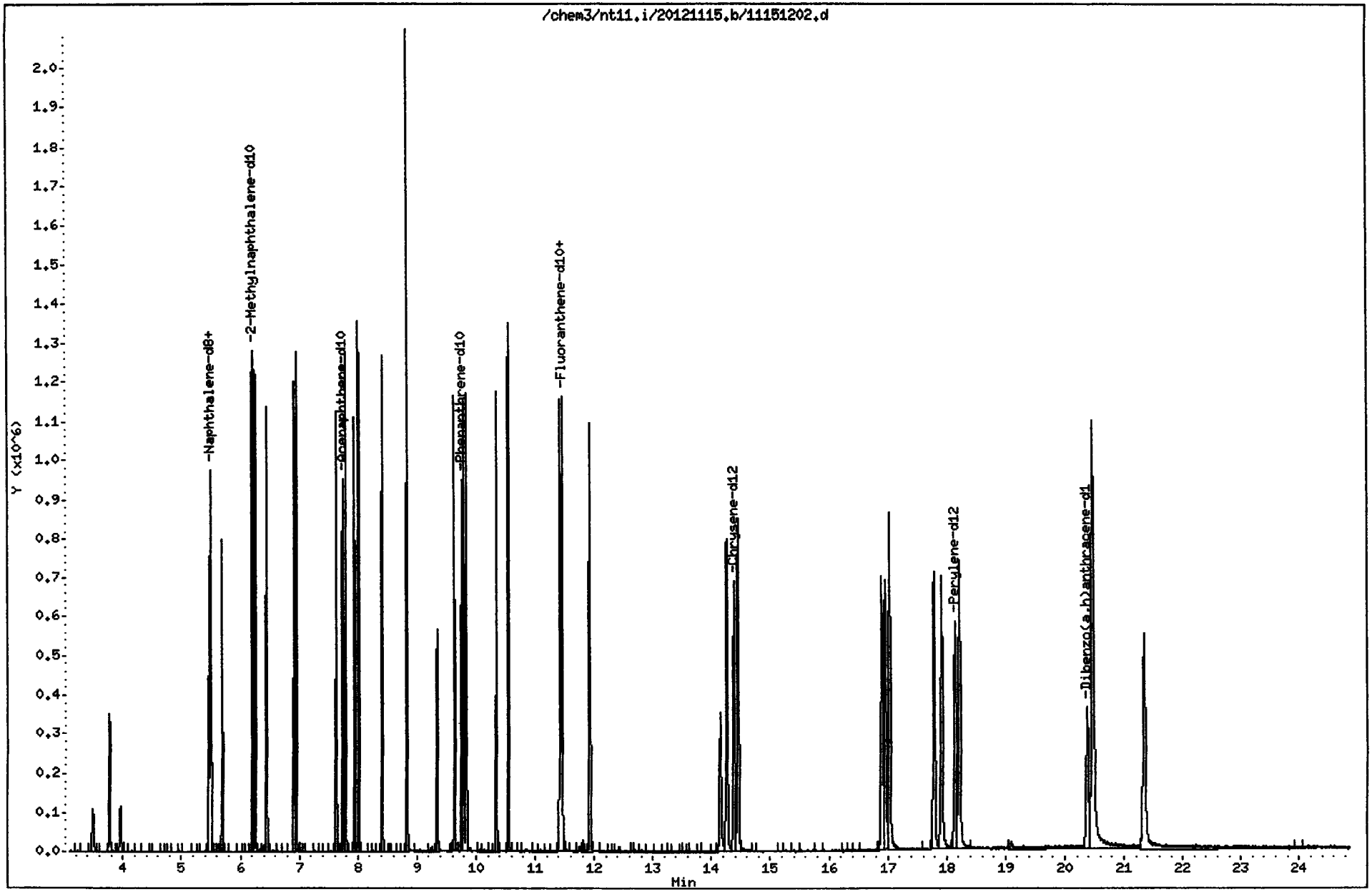
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.47	4.97	5.97	5.47	0.00
22 Acenaphthene-d10	7.74	7.24	8.24	7.74	0.00
28 Phenanthrene-d10	9.76	9.26	10.26	9.76	0.00
47 Chrysene-d12	14.38	13.88	14.88	14.38	0.00
56 Perylene-d12	18.14	17.64	18.64	18.14	0.00

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

Data File: /chem3/nt11.i/20121115.b/11151202.d
Date : 15-NOV-2012 18:53
Client ID: IC251115
Sample Info: IC251115

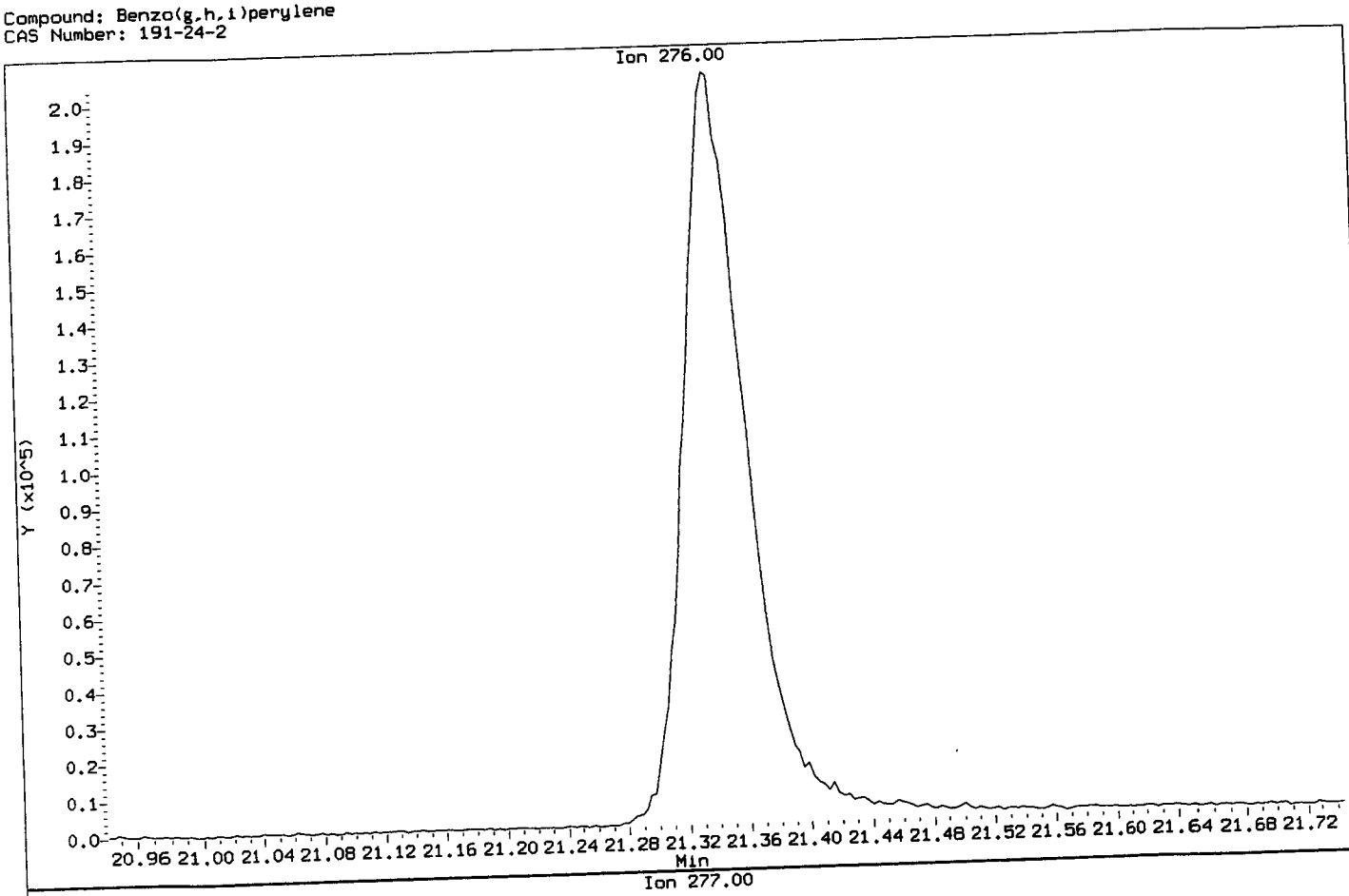
Instrument: nt11.i
Operator: JZ
Column diameter: 0.25

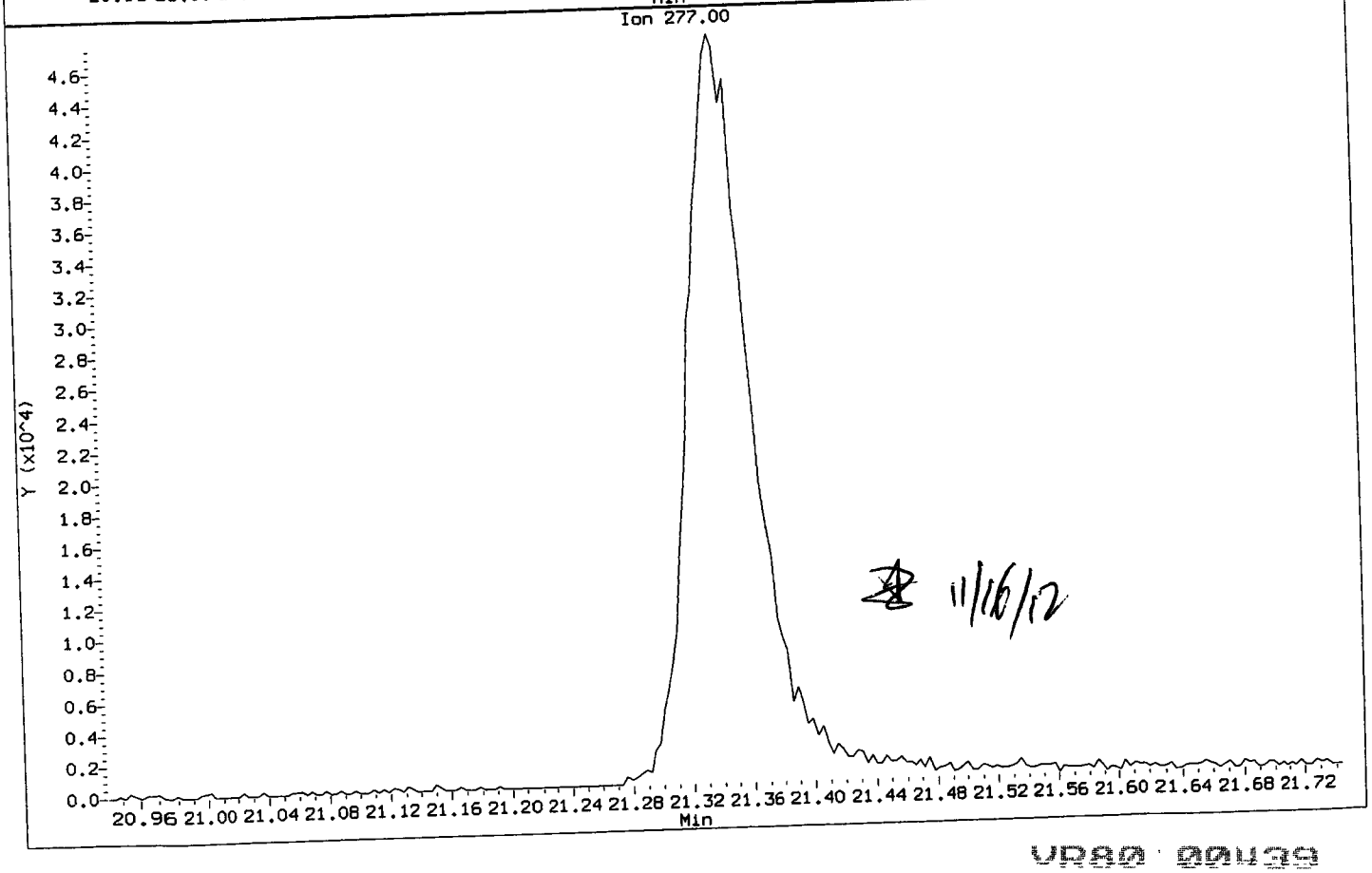
Column phase: ZB-5msi



Data File: /chem3/nt11.i/20121115.b/11151202.d
Injection Date: 15-NOV-2012 18:53
Instrument: nt11.i
Client Sample ID: IC251115

Compound: Benzo(g,h,i)perylene
CAS Number: 191-24-2

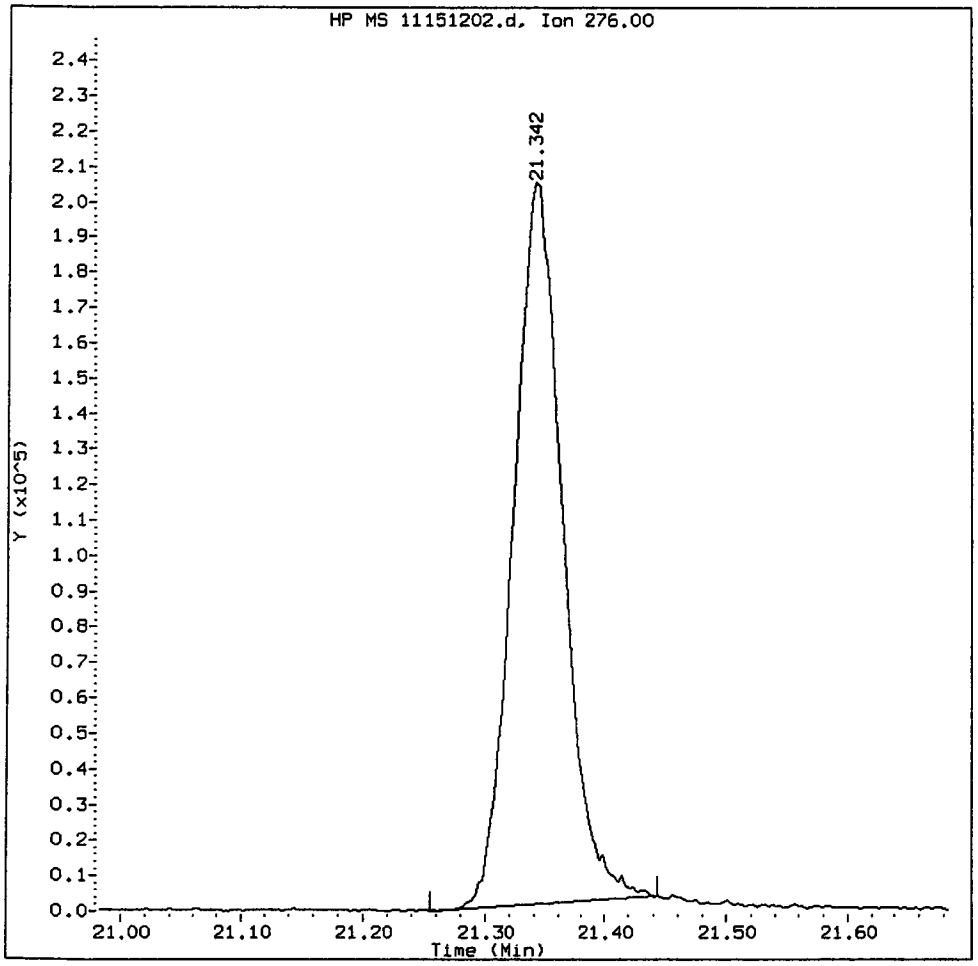




11/16/12

IC251115, /chem3/nt11.i/20121115.b/11151202.d

Benzo(g,h,i)perylene Amount: 2.50 Area: 572831



MANUAL INTEGRATION for Benzo(g,h,i)perylene

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 4/16/12

CO-ELUTION SUMMARY FOR FILE - 11151202.d

Lab ID: IC251115, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 15-NOV-2

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121115.b/11151206.d
Lab Smp Id: IC51115 Client Smp ID: IC51115
Inj Date : 15-NOV-2012 20:54
Operator : JZ Inst ID: nt11.i
Smp Info : IC51115,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Meth Date : 16-Nov-2012 09:06 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 20:54 Cal File: 11151206.d
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NEWSIMPNAICL.sub
Target Version: 3.50

11/16/12

AMOUNTS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 6 Naphthalene-d8	136	5.470	5.470	(1.000)	544640	2.00000	
7 Naphthalene	128	5.498	5.498	(1.005)	1311416	5.00000	4.404
$ 12 2-Methylnaphthalene-d10	152	6.208	6.205	(1.135)	841637	5.00000	4.411
14 2-Methylnaphthalene	141	6.252	6.252	(1.143)	761460	5.00000	4.548
15 1-methylnaphthalene	141	6.448	6.445	(1.179)	719884	5.00000	4.481
19 Biphenyl	154	6.912	6.912	(0.893)	989028	5.00000	4.386
20 2,6-Dimethylnaphthalene	156	6.956	6.953	(0.898)	714168	5.00000	4.456
21 Acenaphthylene	152	7.631	7.631	(0.986)	1262932	5.00000	4.745
* 22 Acenaphthene-d10	164	7.742	7.742	(1.000)	302706	2.00000	
23 Acenaphthene	153	7.792	7.792	(1.007)	749926	5.00000	4.365
11 Dibenzofuran	168	7.944	7.941	(1.026)	1100908	5.00000	4.372
24 1,6,7-Trimethylnaphthalene	170	8.016	8.016	(1.035)	684801	5.00000	4.391
25 Fluorene	166	8.417	8.414	(1.087)	877192	5.00000	4.562
27 Dibenzothiophene	184	9.635	9.635	(0.987)	1068041	5.00000	4.453
* 28 Phenanthrene-d10	188	9.761	9.761	(1.000)	431003	2.00000	
30 Phenanthrene	178	9.796	9.796	(1.004)	1170468	5.00000	4.366
31 Anthracene	178	9.837	9.834	(1.008)	1179017	5.00000	4.629
26 Carbazole	167	10.348	10.345	(1.060)	1205604	5.00000	4.583
33 1-Methylphenanthrene	192	10.547	10.544	(1.080)	869675	5.00000	4.539
36 Fluoranthene	202	11.456	11.453	(1.174)	1210404	5.00000	4.536
$ 253 Fluoranthene-d10	212	11.421	11.418	(1.170)	1164970	5.00000	4.656
39 Pyrene	202	11.923	11.920	(0.829)	1272149	5.00000	4.583
46 Benzo(a)anthracene	228	14.261	14.255	(0.992)	1144766	5.00000	4.530
* 47 Chrysene-d12	240	14.378	14.378	(1.000)	495359	2.00000	
48 Chrysene	228	14.451	14.444	(1.005)	1113639	5.00000	4.510
51 Benzo(b)fluoranthene	252	16.902	16.893	(0.932)	1103927	5.00000	4.663
52 Benzo(k)fluoranthene	252	16.962	16.950	(0.935)	1218088	5.00000	4.692(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
	251 Benzo(j)fluoranthene	252	17.035	17.022	(0.939)	1258282	5.00000	4.590
	55 Benzo(e)pyrene	252	17.792	17.780	(0.981)	1130284	5.00000	4.538
	54 Benzo(a)pyrene	252	17.919	17.906	(0.988)	1165219	5.00000	4.832
*	56 Perylene-d12	264	18.143	18.139	(1.000)	510632	2.00000	
	57 Perylene	252	18.218	18.209	(1.004)	1152789	5.00000	4.548
$	60 Dibenzo(a,h)anthracene-d14	292	20.380	20.367	(1.123)	920202	5.00000	5.911
	63 Indeno(1,2,3-cd)pyrene	276	20.475	20.459	(1.129)	1468831	5.00000	5.079
	62 Dibenzo(a,h)anthracene	278	20.471	20.459	(1.128)	1204941	5.00000	5.098
	61 Benzo(g,h,i)perylene	276	21.349	21.333	(1.177)	1221377	5.00000	5.017(M)

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11151206.d
Lab Smp Id: IC51115
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Misc Info: 12-

Calibration Date: 15-NOV-2012
Calibration Time: 18:53
Client Smp ID: IC51115
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	544640	5.53
22 Acenaphthene-d10	284255	142128	568510	302706	6.49
28 Phenanthrene-d10	410660	205330	821320	431003	4.95
47 Chrysene-d12	467886	233943	935772	495359	5.87
56 Perylene-d12	472330	236165	944660	510632	8.11

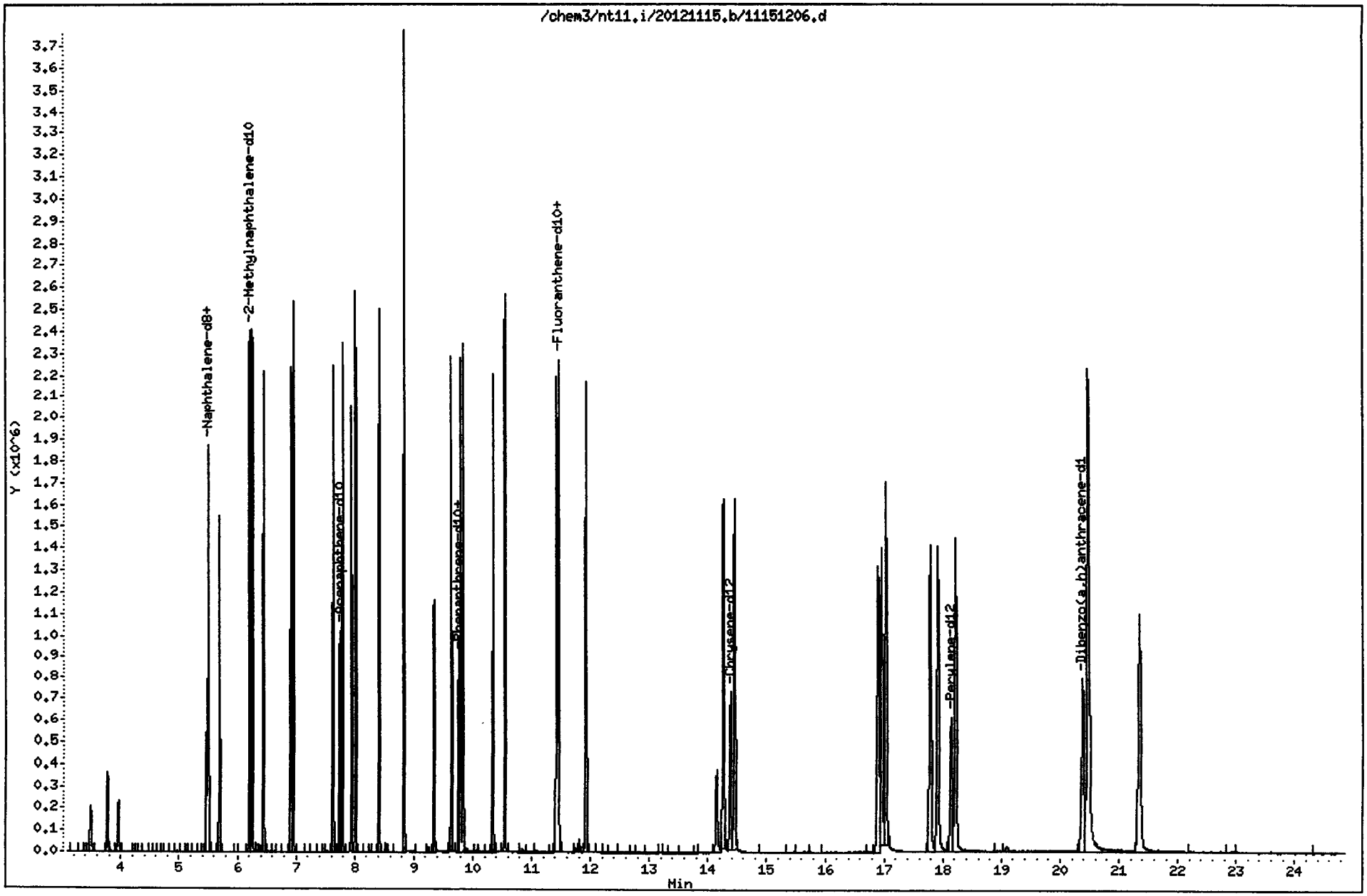
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.47	4.97	5.97	5.47	-0.06
22 Acenaphthene-d10	7.74	7.24	8.24	7.74	-0.04
28 Phenanthrene-d10	9.76	9.26	10.26	9.76	0.00
47 Chrysene-d12	14.38	13.88	14.88	14.38	-0.02
56 Perylene-d12	18.14	17.64	18.64	18.14	0.00

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

Data File: /chem3/nt11.i/20121115.b/11151206.d
Date : 15-NOV-2012 20:54
Client ID: IC51115
Sample Info: IC51115,

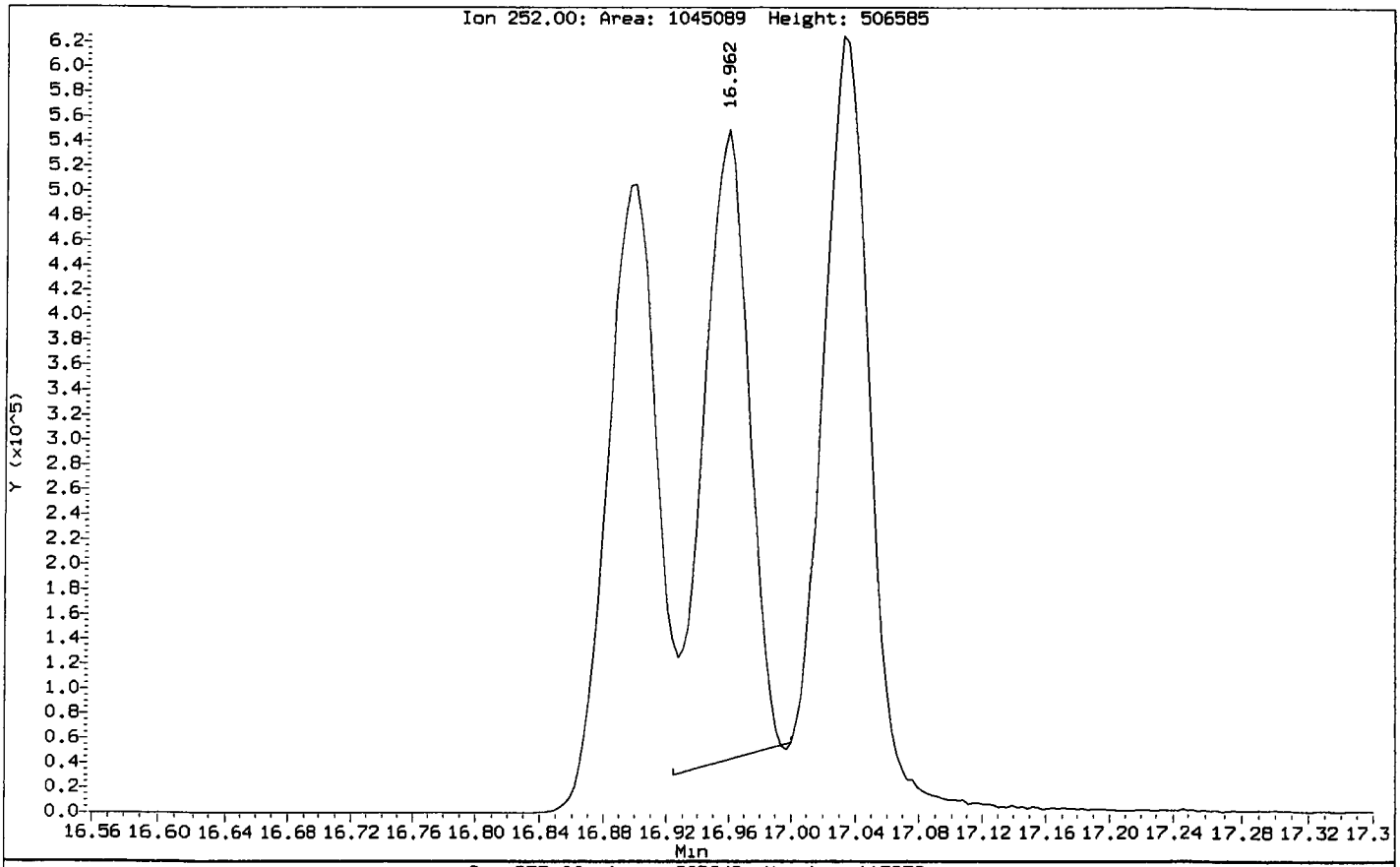
Instrument: nt11.i
Operator: JZ
Column diameter: 0.25

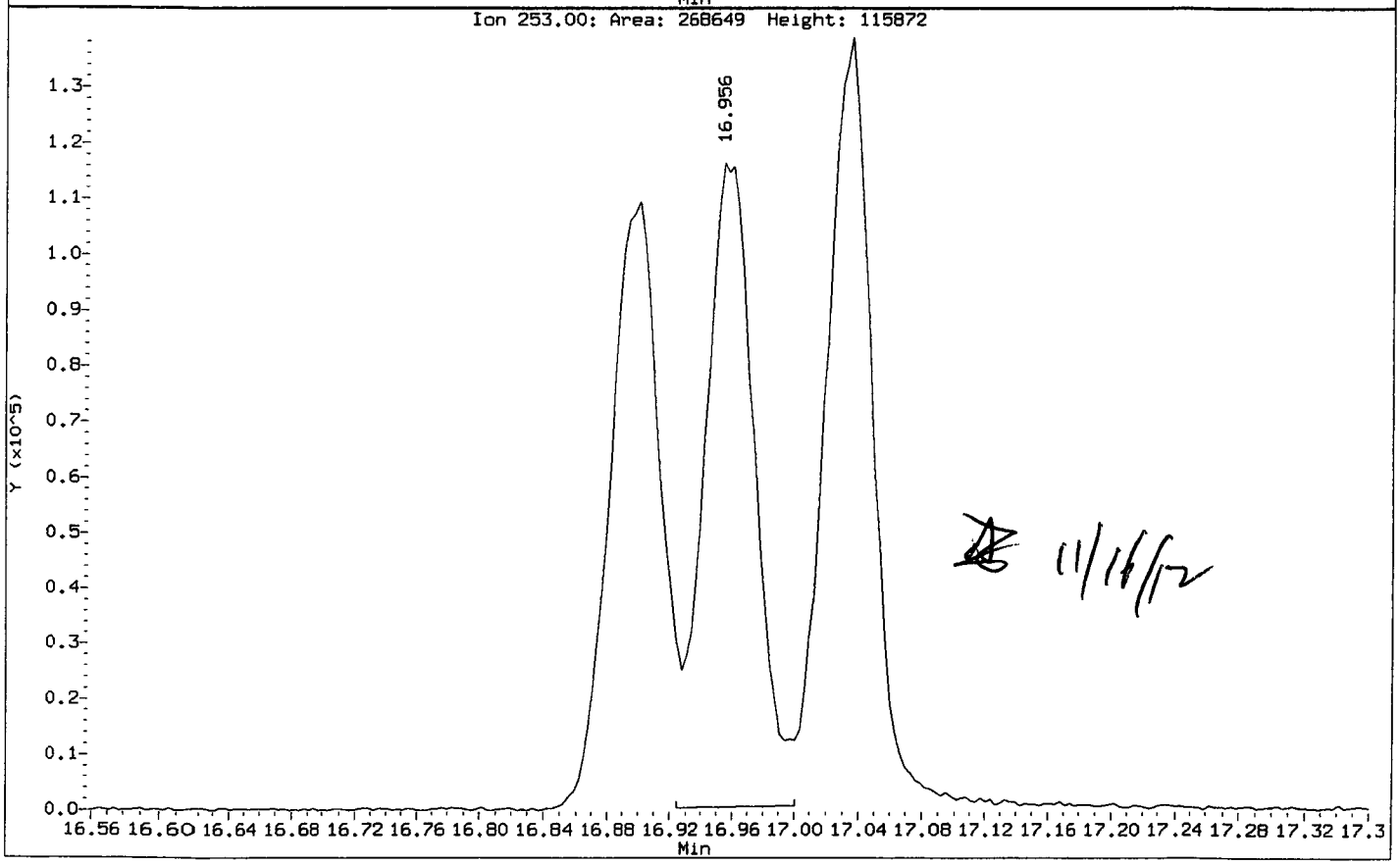
Column phase: ZB-5msi



Data File: /chem3/nt11.i/20121115.b/11151206.d
Injection Date: 15-NOV-2012 20:54
Instrument: nt11.i
Client Sample ID: IC51115

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9

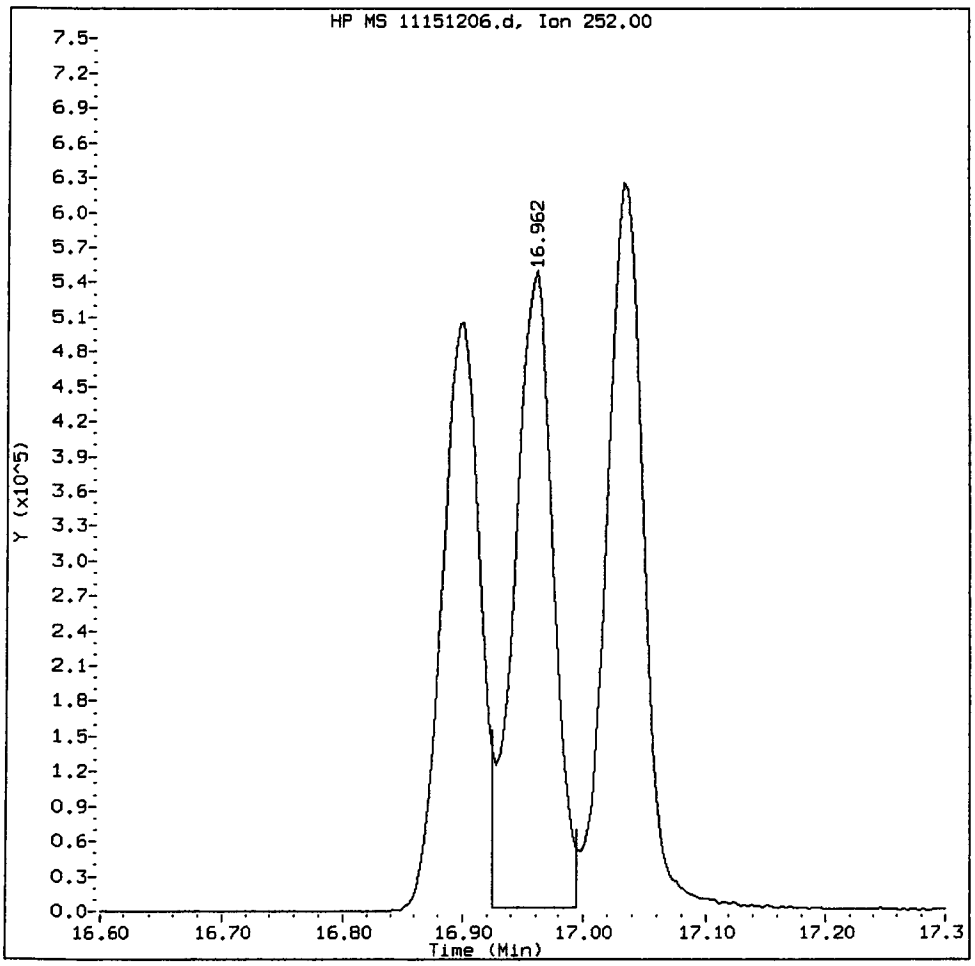




11/16/12

IC51115, /chem3/nt11.i/20121115.b/11151206.d

Benzo(k)fluoranthene Amount: 4.69 Area: 1218088



MANUAL INTEGRATION for Benzo(k)fluoranthene

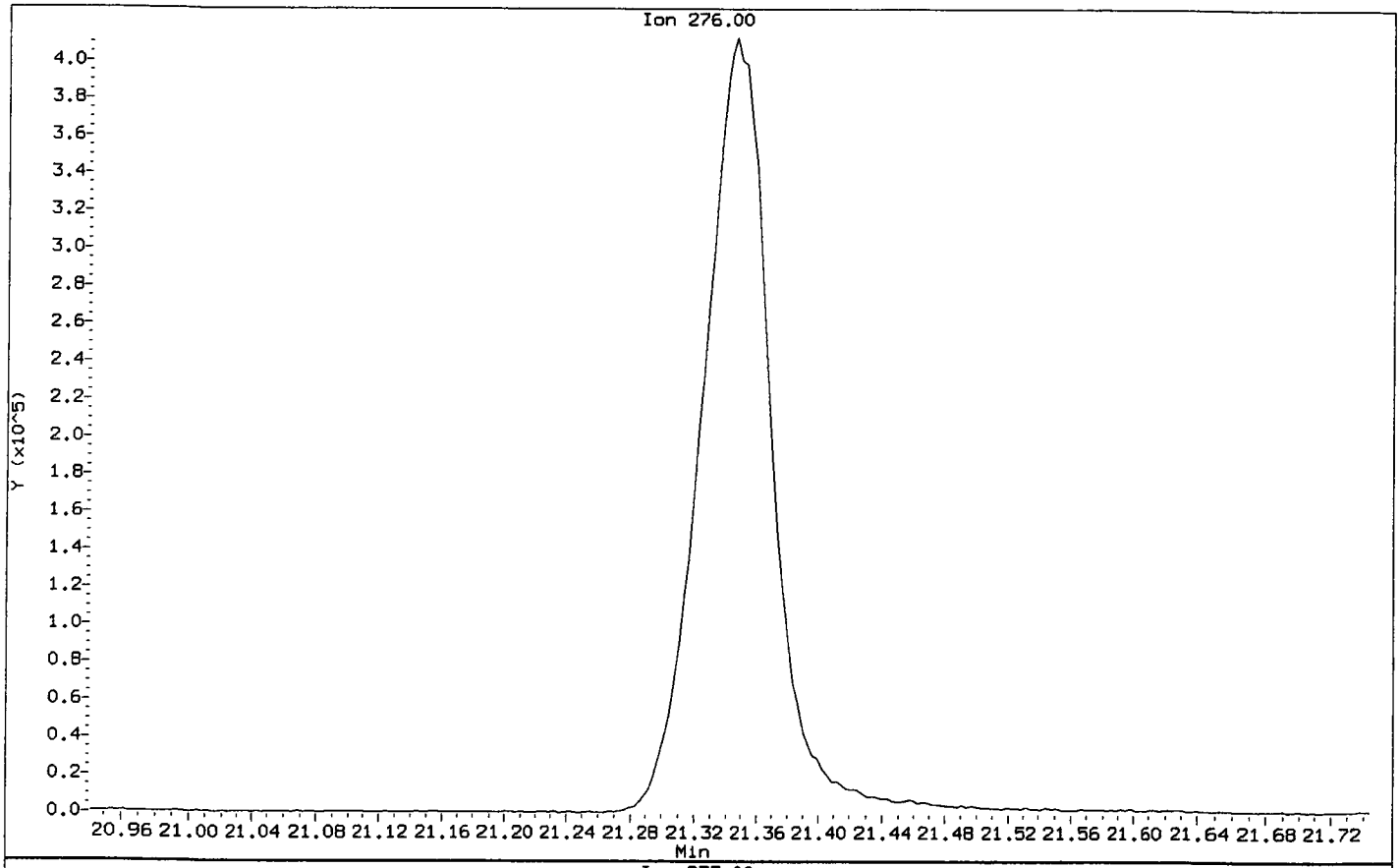
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

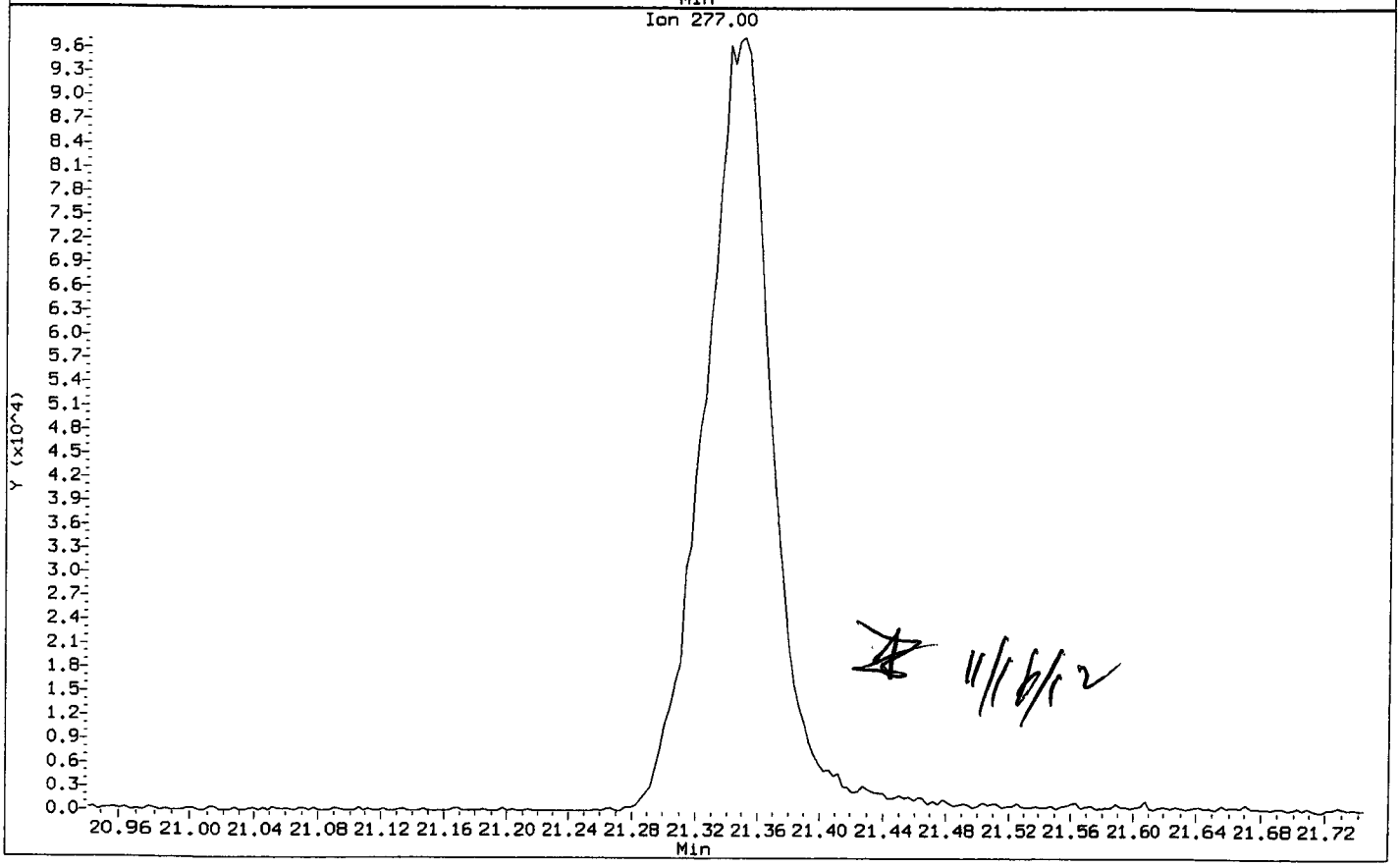
5. Other _____

Analyst: _____ Date: 4/16/12

Data File: /chem3/nt11.i/20121115.b/11151206.d
Injection Date: 15-NOV-2012 20:54
Instrument: nt11.i
Client Sample ID: IC51115

Compound: Benzo(g,h,i)perylene
CAS Number: 191-24-2

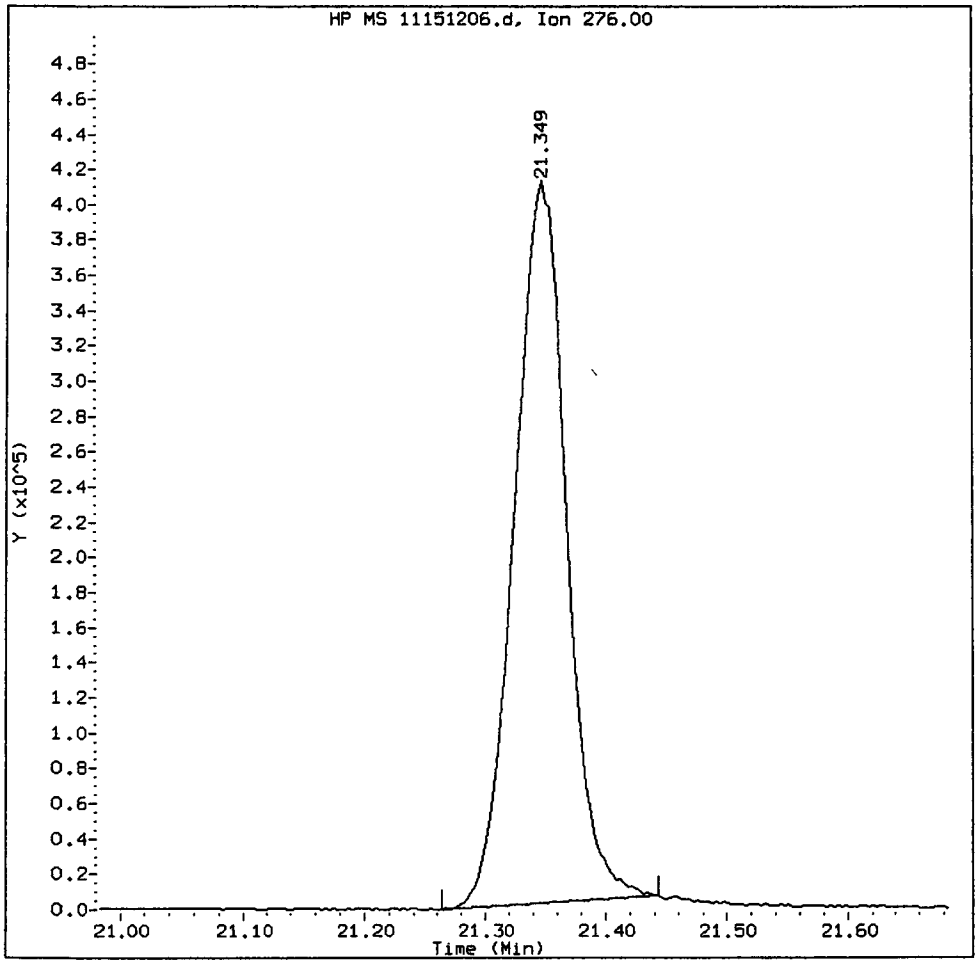




11/16/12

IC51115, /chem3/nt11.i/20121115.b/11151206.d

Benzo(g,h,i)perylene Amount: 5.02 Area: 1221377



MANUAL INTEGRATION for Benzo(g,h,i)perylene

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 11/16/12

CO-ELUTION SUMMARY FOR FILE - 11151206.d

Lab ID: IC51115, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 15-NOV-20

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121115.b/11151207.d
Lab Smp Id: IC101115 Client Smp ID: IC101115
Inj Date : 15-NOV-2012 21:24
Operator : JZ Inst ID: nt11.i
Smp Info : IC101115,
Misc Info : 12-
Comment : 1ul Injection
Method : /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Meth Date : 16-Nov-2012 09:06 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 21:24 Cal File: 11151207.d
Als bottle: 7 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: NEWSIMPNAICL.sub
Target Version: 3.50

11/16/12

AMOUNTS

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
* 6 Naphthalene-d8	136	5.470	5.470	(1.000)	559831	2.00000	
7 Naphthalene	128	5.502	5.498	(1.006)	2647781	10.0000	8.850
$ 12 2-Methylnaphthalene-d10	152	6.208	6.205	(1.135)	1670466	10.0000	8.733
14 2-Methylnaphthalene	141	6.256	6.252	(1.144)	1509183	10.0000	8.953
15 1-methylnaphthalene	141	6.448	6.445	(1.179)	1431274	10.0000	8.864
19 Biphenyl	154	6.915	6.912	(0.893)	1939004	10.0000	8.623
20 2,6-Dimethylnaphthalene	156	6.956	6.953	(0.898)	1400950	10.0000	8.745
21 Acenaphthylene	152	7.635	7.631	(0.986)	2533981	10.0000	9.402
* 22 Acenaphthene-d10	164	7.742	7.742	(1.000)	310166	2.00000	
23 Acenaphthene	153	7.796	7.792	(1.007)	1482694	10.0000	8.651
11 Dibenzofuran	168	7.944	7.941	(1.026)	2165956	10.0000	8.626
24 1,6,7-Trimethylnaphthalene	170	8.020	8.016	(1.036)	1334457	10.0000	8.588
25 Fluorene	166	8.420	8.414	(1.088)	1727146	10.0000	8.950
27 Dibenzothiophene	184	9.639	9.635	(0.987)	2089694	10.0000	8.670
* 28 Phenanthrene-d10	188	9.762	9.761	(1.000)	444629	2.00000	
30 Phenanthrene	178	9.799	9.796	(1.004)	2285367	10.0000	8.509
31 Anthracene	178	9.840	9.834	(1.008)	2332602	10.0000	9.047
26 Carbazole	167	10.352	10.345	(1.060)	2371843	10.0000	8.928
33 1-Methylphenanthrene	192	10.550	10.544	(1.081)	1705664	10.0000	8.831
36 Fluoranthene	202	11.462	11.453	(1.174)	2382669	10.0000	8.855
$ 253 Fluoranthene-d10	212	11.425	11.418	(1.170)	2324424	10.0000	9.157
39 Pyrene	202	11.929	11.920	(0.830)	2536391	10.0000	9.162
46 Benzo(a)anthracene	228	14.268	14.255	(0.992)	2332594	10.0000	9.241
* 47 Chrysene-d12	240	14.381	14.378	(1.000)	502333	2.00000	
48 Chrysene	228	14.460	14.444	(1.005)	2179568	10.0000	8.896(M)
51 Benzo(b)fluoranthene	252	16.909	16.893	(0.932)	2398209	10.0000	9.911
52 Benzo(k)fluoranthene	252	16.975	16.950	(0.935)	2477735	10.0000	9.428(M)

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
251	Benzo(j)fluoranthene	252	17.051	17.022	(0.940)	2600379	10.0000	9.379
55	Benzo(e)pyrene	252	17.805	17.780	(0.981)	2315497	10.0000	9.220
54	Benzo(a)pyrene	252	17.931	17.906	(0.988)	2401633	10.0000	9.771
* 56	Perylene-d12	264	18.146	18.139	(1.000)	522850	2.00000	
57	Perylene	252	18.231	18.209	(1.005)	2316715	10.0000	9.089 (M)
$ 60	Dibenzo(a,h)anthracene-d14	292	20.393	20.367	(1.124)	1965096	10.0000	11.87
63	Indeno(1,2,3-cd)pyrene	276	20.500	20.459	(1.130)	3073609	10.0000	10.31
62	Dibenzo(a,h)anthracene	278	20.497	20.459	(1.130)	2460774	10.0000	10.14
61	Benzo(g,h,i)perylene	276	21.374	21.333	(1.178)	2745901	10.0000	10.83

QC Flag Legend

M - Compound response manually integrated.

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11151207.d
Lab Smp Id: IC101115
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121115.b/FSIMPNA111512.m
Misc Info: 12-

Calibration Date: 15-NOV-2012
Calibration Time: 18:53
Client Smp ID: IC101115
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	559831	8.47
22 Acenaphthene-d10	284255	142128	568510	310166	9.12
28 Phenanthrene-d10	410660	205330	821320	444629	8.27
47 Chrysene-d12	467886	233943	935772	502333	7.36
56 Perylene-d12	472330	236165	944660	522850	10.70

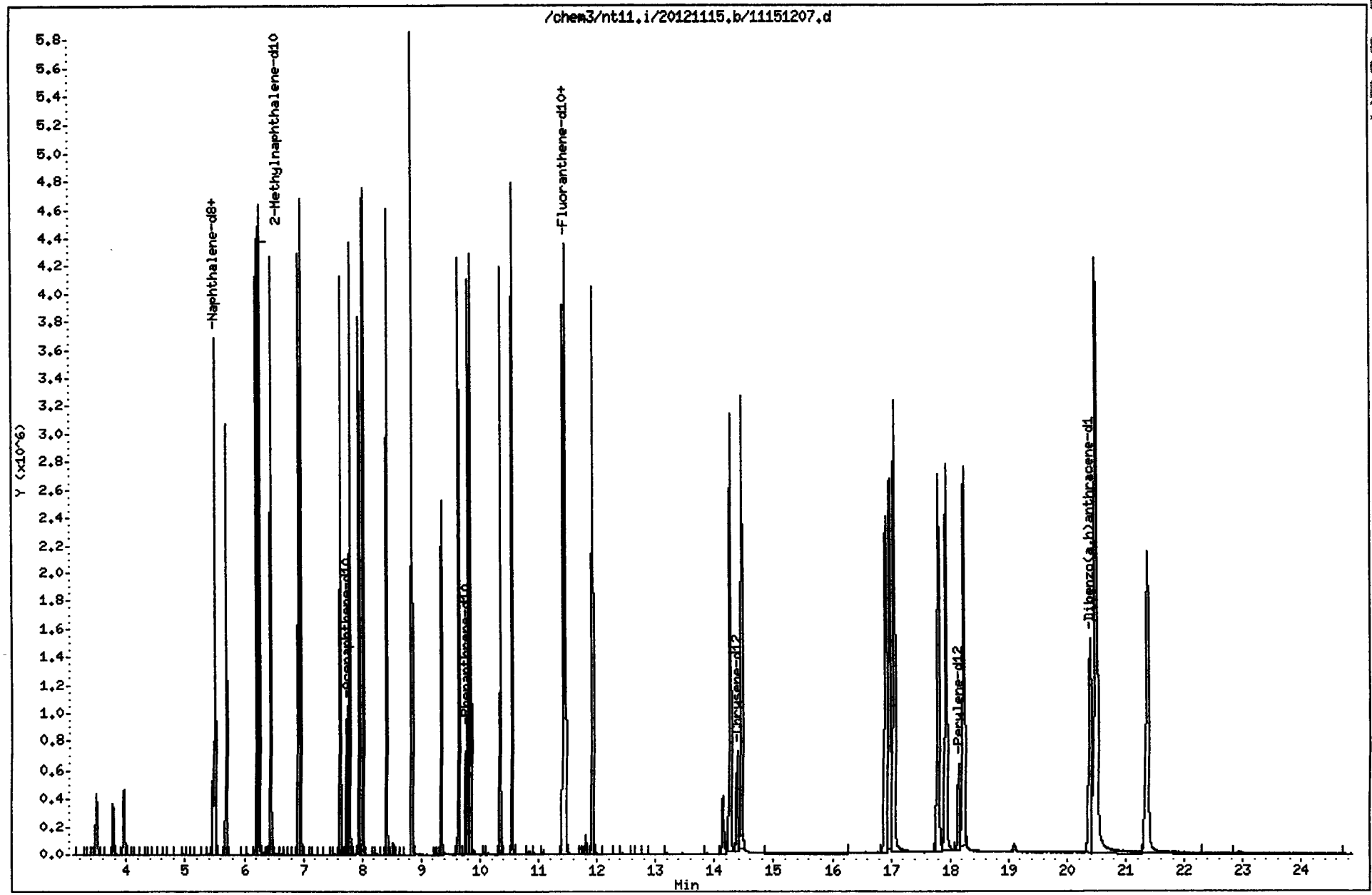
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.47	4.97	5.97	5.47	-0.05
22 Acenaphthene-d10	7.74	7.24	8.24	7.74	-0.04
28 Phenanthrene-d10	9.76	9.26	10.26	9.76	0.00
47 Chrysene-d12	14.38	13.88	14.88	14.38	0.00
56 Perylene-d12	18.14	17.64	18.64	18.15	0.02

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

Data File: /chem3/nt11.i/20121115.b/11151207.d
Date : 15-NOV-2012 21:24
Client ID: IC101115
Sample Info: IC101115,

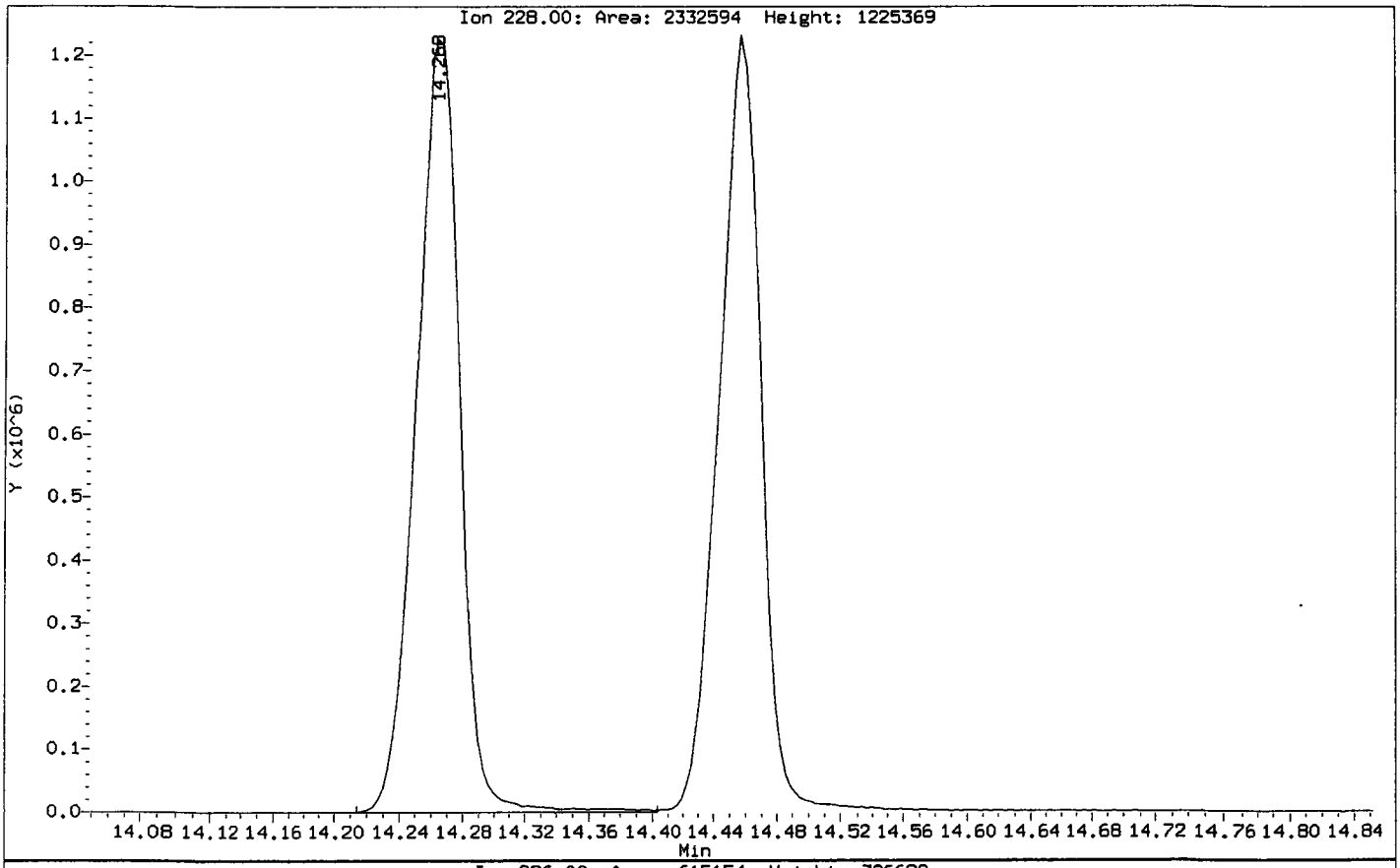
Instrument: nt11.i
Operator: JZ
Column diameter: 0.25

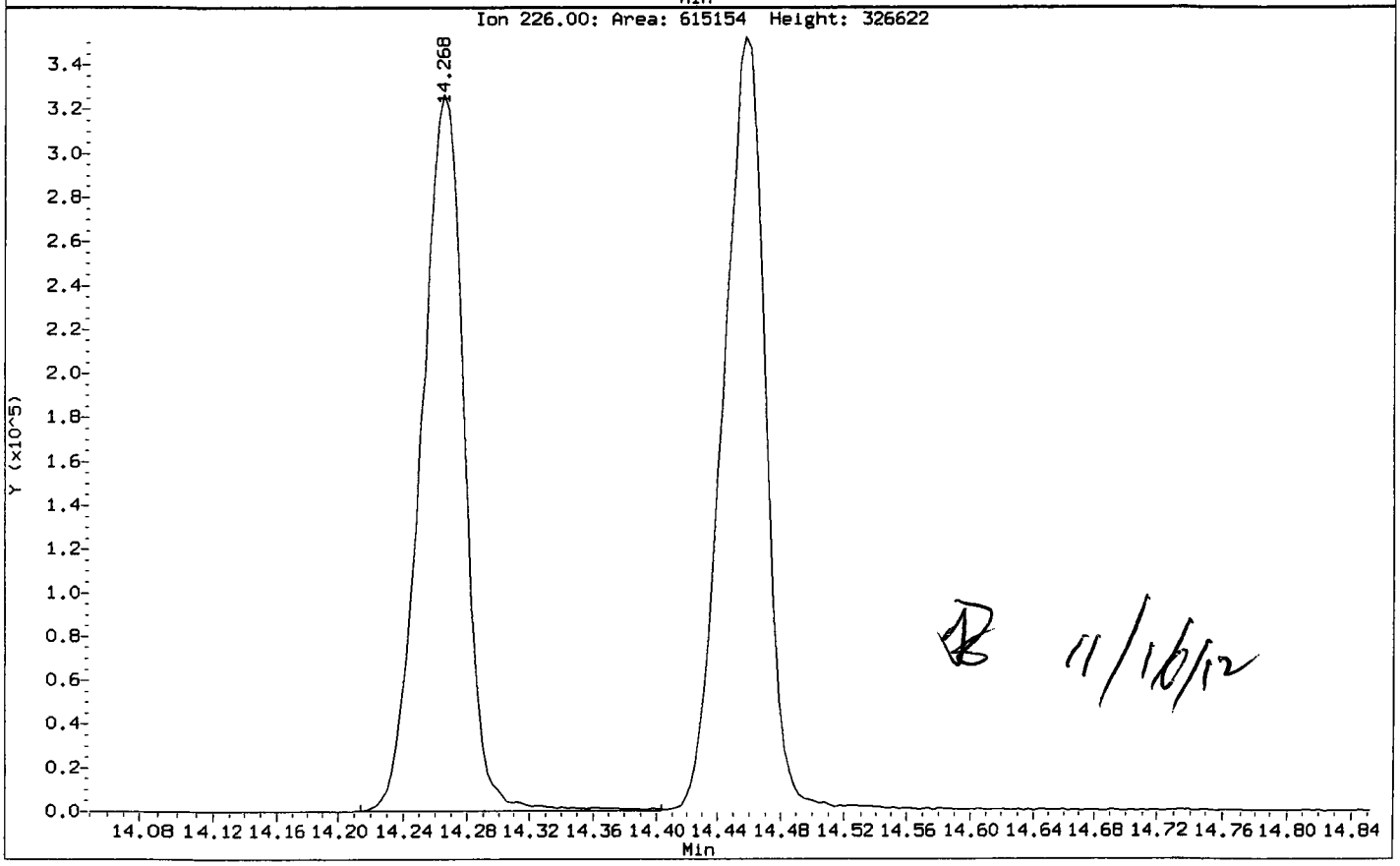
Column phase: ZB-5msi



Data File: /chem3/nt11.i/20121115.b/11151207.d
Injection Date: 15-NOV-2012 21:24
Instrument: nt11.i
Client Sample ID: IC101115

Compound: Chrysene
CAS Number: 218-01-9

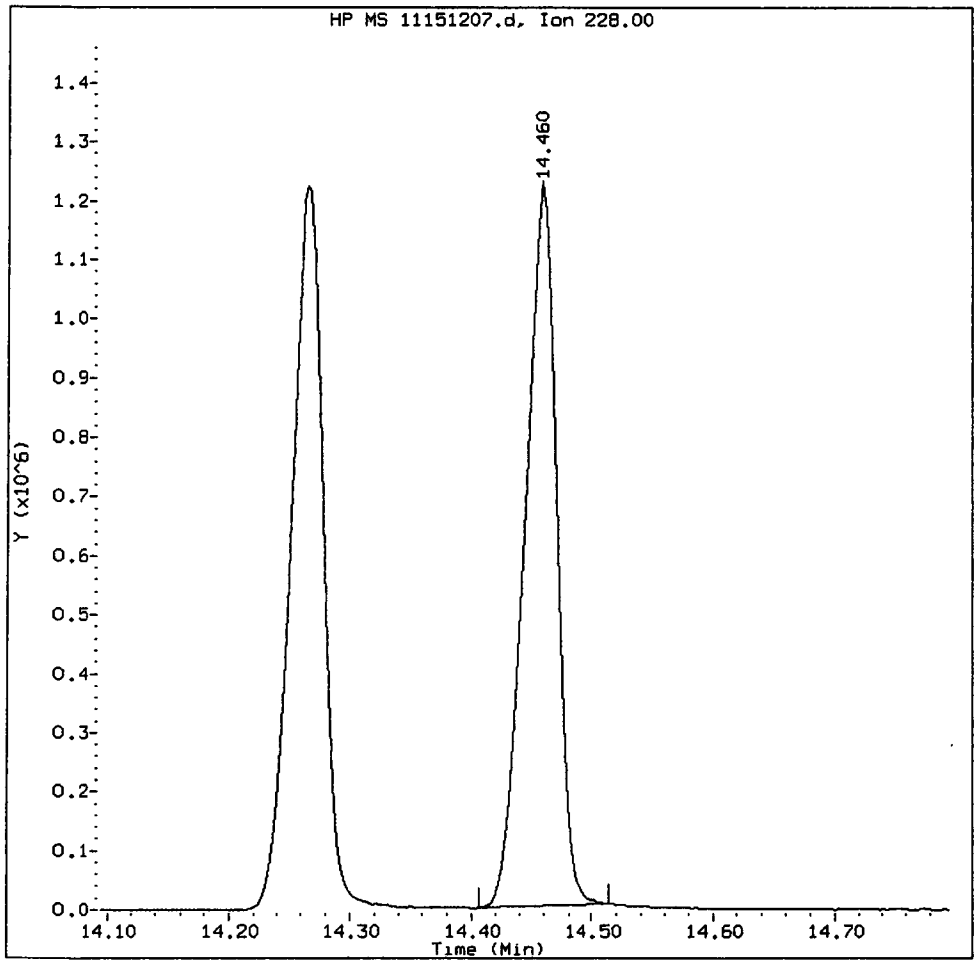




B 11/16/12

IC101115, /chem3/nt11.i/20121115.b/11151207.d

Chrysene Amount: 8.90 Area: 2179568



MANUAL INTEGRATION for Chrysene

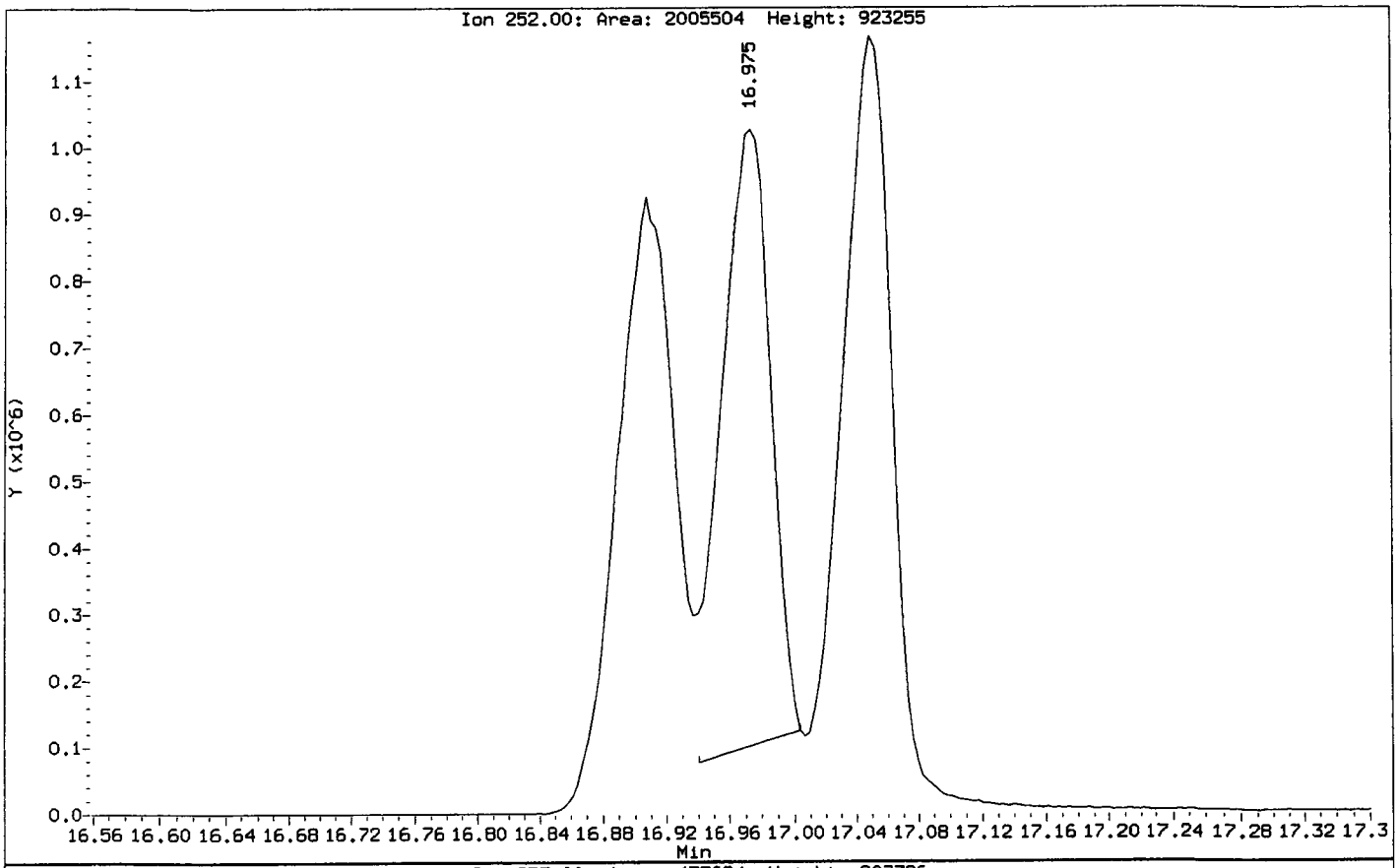
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

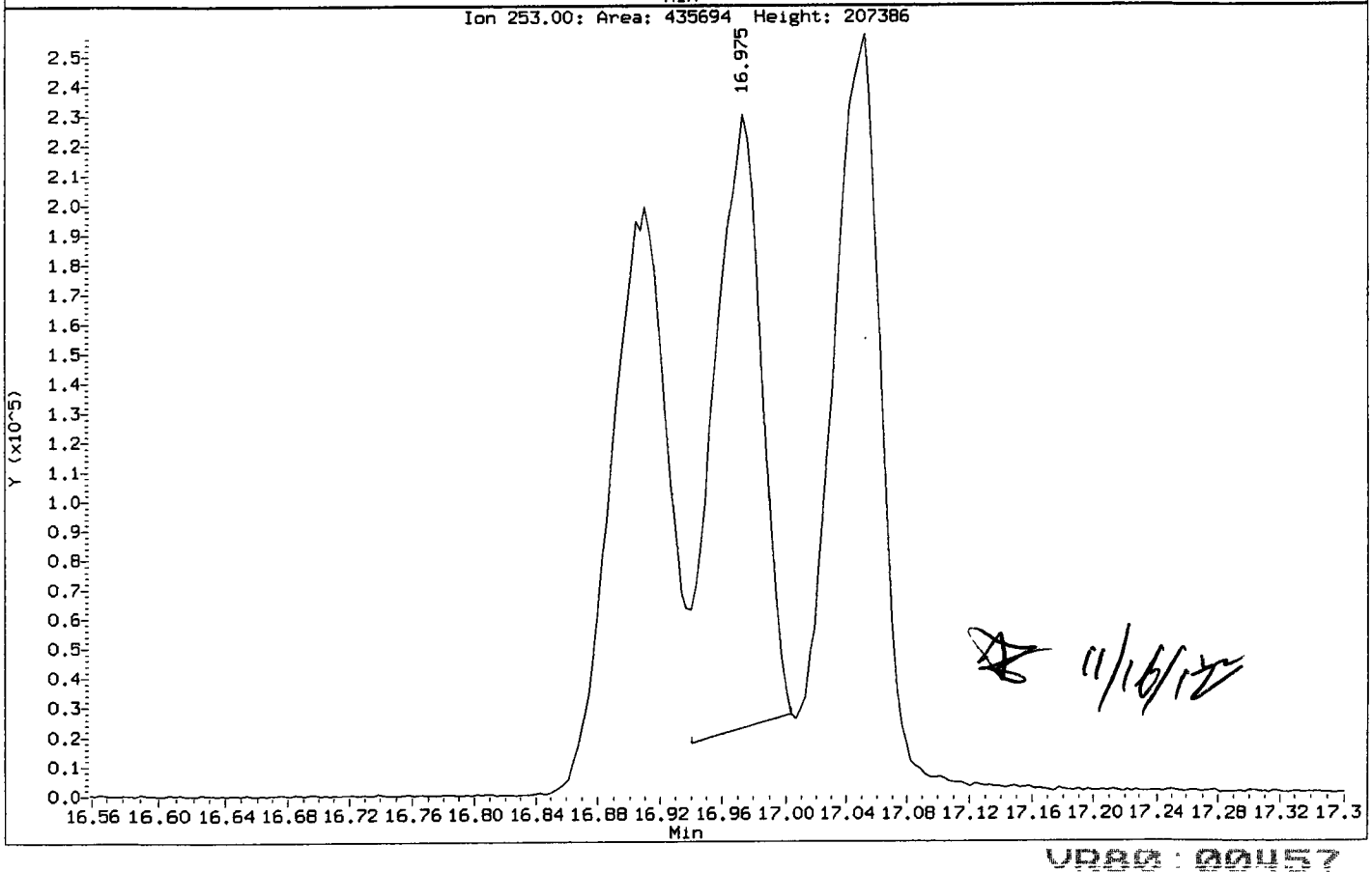
5. Other _____

Analyst: _____ Date: 1/16/12

Data File: /chem3/nt11.i/20121115.b/11151207.d
Injection Date: 15-NOV-2012 21:24
Instrument: nt11.i
Client Sample ID: IC101115

Compound: Benzo(k)fluoranthene
CAS Number: 207-08-9



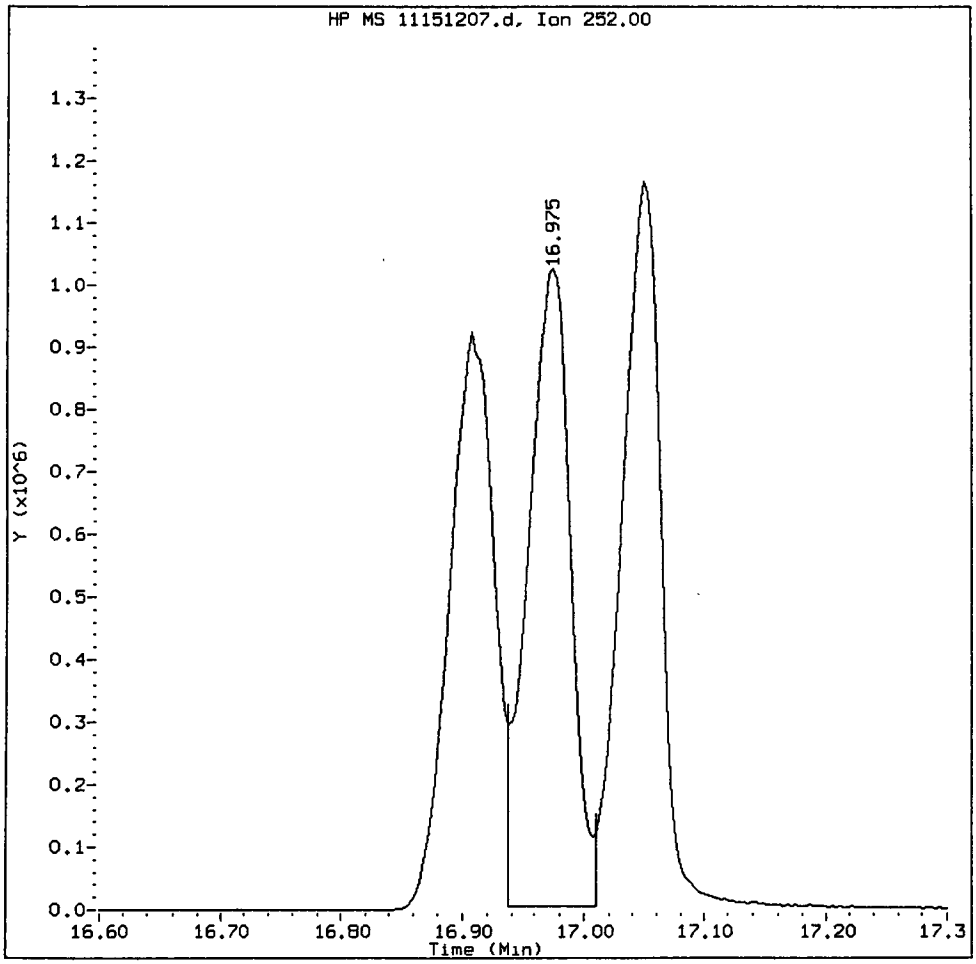


11/16/12

VD80 : 00057

IC101115, /chem3/nt11.i/20121115.b/11151207.d

Benzo(k)fluoranthene Amount: 9.43 Area: 2477735



MANUAL INTEGRATION for Benzo(k)fluoranthene

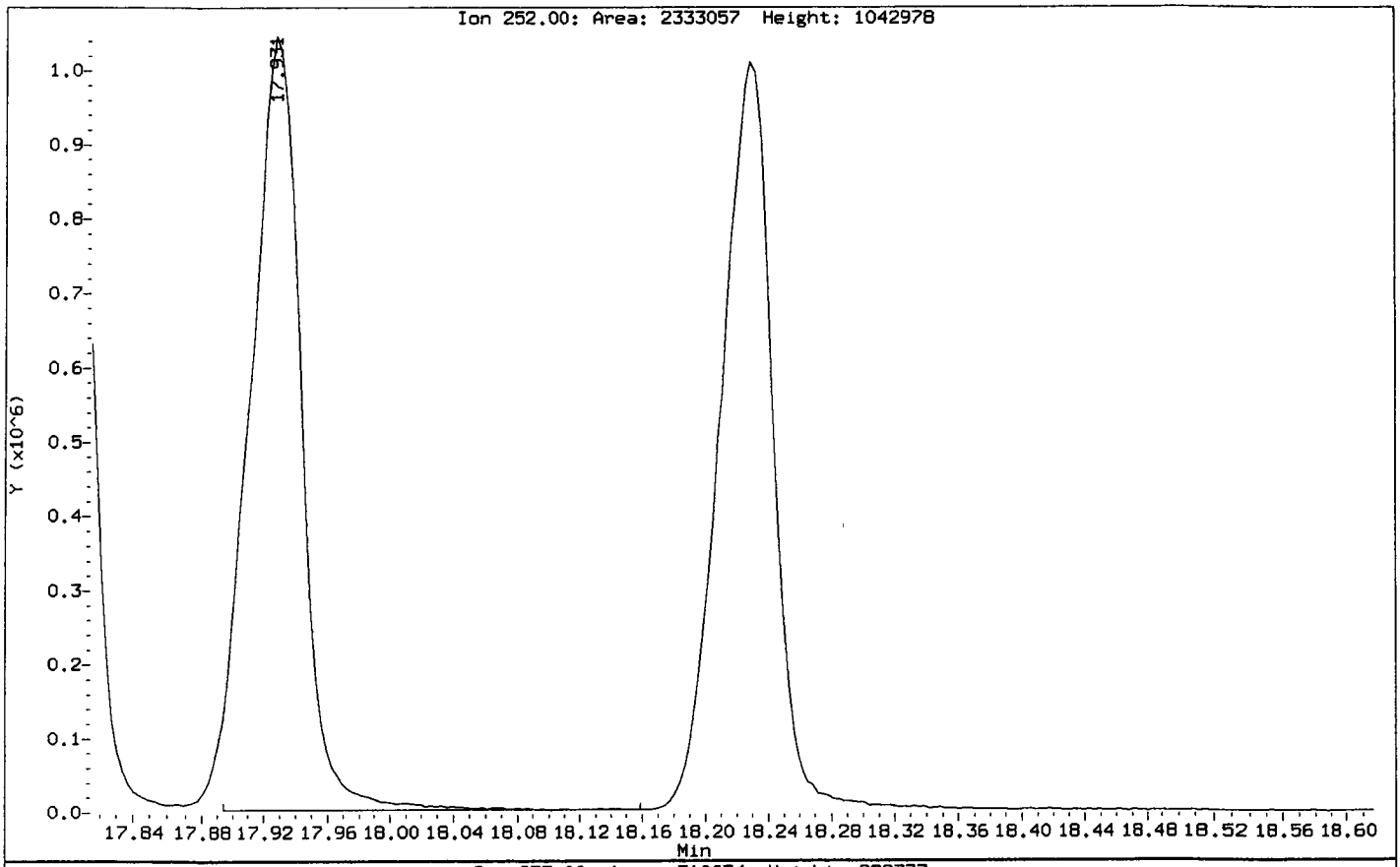
1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

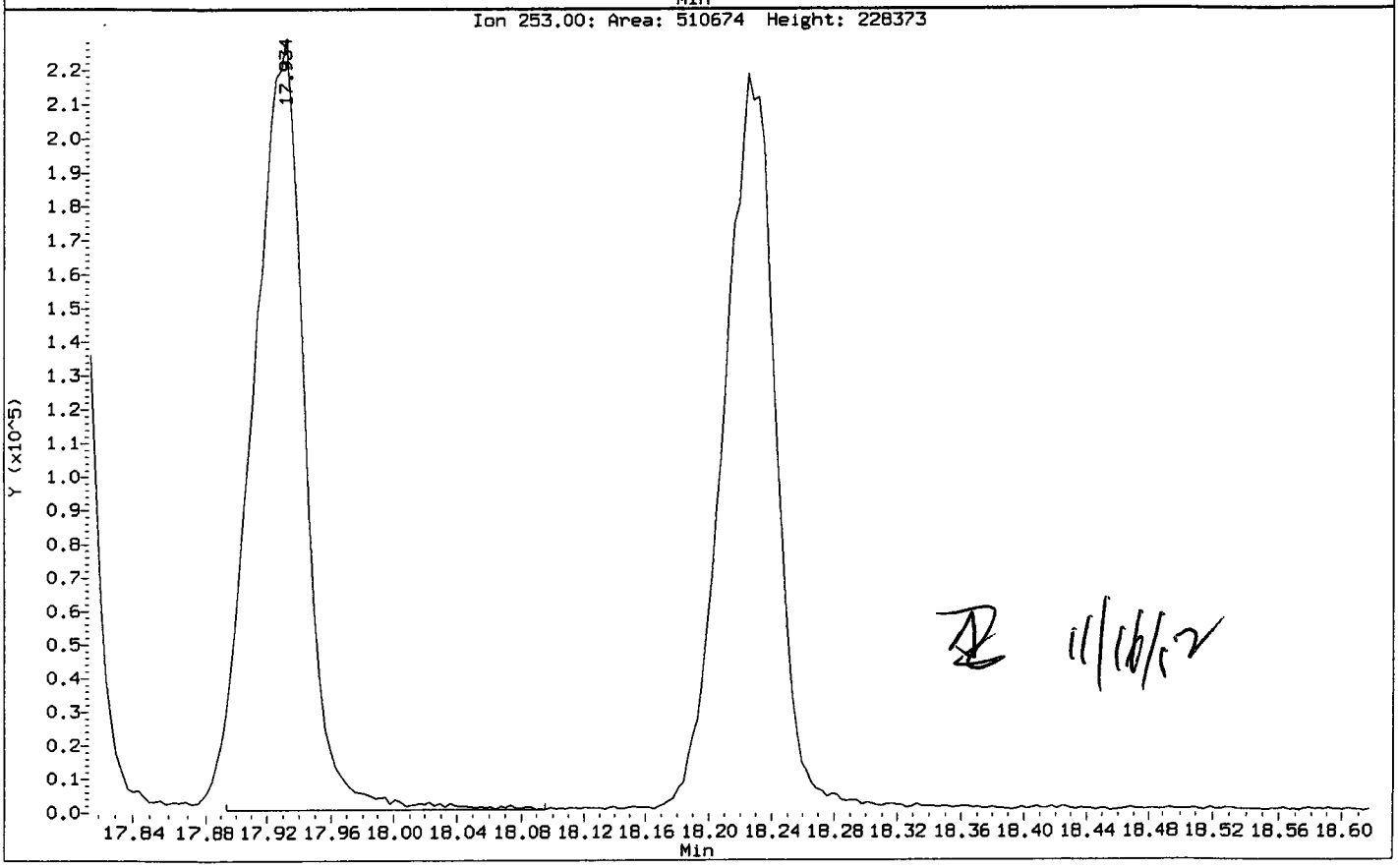
5. Other _____

Analyst: _____ Date: 11/16/12

Data File: /chem3/nt11.i/20121115.b/11151207.d
Injection Date: 15-NOV-2012 21:24
Instrument: nt11.i
Client Sample ID: IC101115

Compound: Perylene
CAS Number:

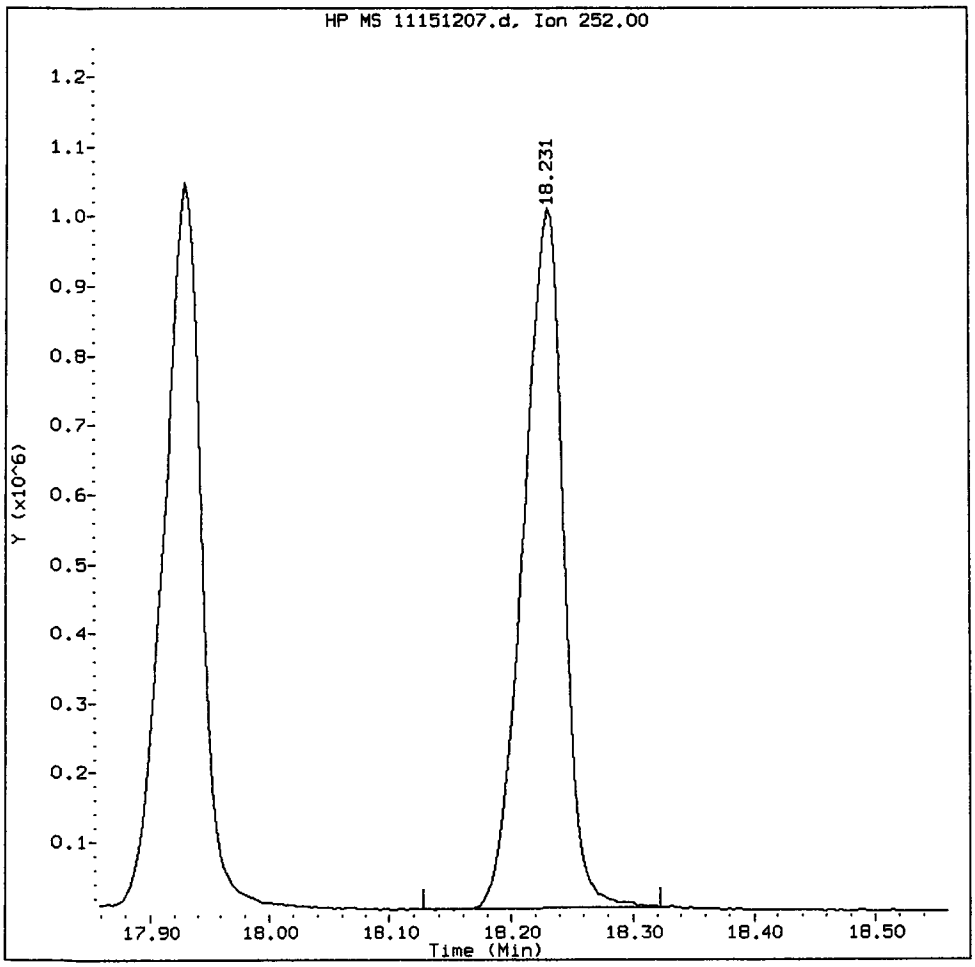




11/16/12

IC101115, /chem3/nt11.i/20121115.b/11151207.d

Perylene Amount: 9.09 Area: 2316715



MANUAL INTEGRATION for Perylene

1. Baseline correction
2. Poor chromatography
3. Peak not found
4. Totals calculation

5. Other _____

Analyst: _____ Date: 11/16/12

CO-ELUTION SUMMARY FOR FILE - 11151207.d

Lab ID: IC101115, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 15-NOV-2

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121116.b/11161202.d
Lab Smp Id: ICV1115 Client Smp ID: ICV1115
Inj Date : 16-NOV-2012 08:51
Operator : JZ Inst ID: nt11.i
Smp Info : ICV1115
Misc Info : 12-
Comment : 1ul Injection
Method : /chem3/nt11.i/20121116.b/FSIMPNA111512.m
Meth Date : 16-Nov-2012 14:29 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 20:24 Cal File: 11151205.d
Als bottle: 2 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnaf.sub
Target Version: 3.50

D 11/16/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

MSS added in

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 6 Naphthalene-d8	136	5.473	5.473	(1.000)	553949	2.00000	
7 Naphthalene	128	5.501	5.501	(1.005)	707447	2.38963	2.390
$ 12 2-Methylnaphthalene-d10	152	Compound Not Detected.					
14 2-Methylnaphthalene	141	6.256	6.256	(1.143)	407552	2.44331	2.443
15 1-methylnaphthalene	141	6.448	6.448	(1.178)	387966	2.42832	2.428
21 Acenaphthylene	152	7.635	7.631	(0.986)	667076	2.51549	2.515
* 22 Acenaphthene-d10	164	7.745	7.742	(1.000)	305185	2.00000	
23 Acenaphthene	153	7.795	7.792	(1.007)	369135	2.18883	2.189
11 Dibenzofuran	168	7.947	7.944	(1.026)	591418	2.39381	2.394
25 Fluorene	166	8.420	8.417	(1.087)	464166	2.44453	2.445
* 28 Phenanthrene-d10	188	9.765	9.761	(1.000)	428464	2.00000	
30 Phenanthrene	178	9.799	9.796	(1.004)	624942	2.41463	2.415
31 Anthracene	178	9.840	9.837	(1.008)	606429	2.44076	2.441
36 Fluoranthene	202	11.459	11.456	(1.174)	638802	2.46350	2.463
$ 253 Fluoranthene-d10	212	Compound Not Detected.					
39 Pyrene	202	11.929	11.923	(0.829)	669509	2.53704	2.537

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
	46 Benzo(a)anthracene	228	14.268	14.258	(0.992)	597696	2.48392	2.484
*	47 Chrysene-d12	240	14.387	14.381	(1.000)	478871	2.00000	
	48 Chrysene	228	14.457	14.454	(1.005)	582904	2.49582	2.496
	51 Benzo(b)fluoranthene	252	16.902	16.896	(0.931)	578883	2.59265	2.593
	52 Benzo(k)fluoranthene	252	16.962	16.956	(0.935)	607872	2.50683	2.507
	251 Benzo(j)fluoranthene	252	17.038	17.032	(0.939)	558823	2.18425	2.184
	54 Benzo(a)pyrene	252	17.922	17.912	(0.987)	584905	2.57903	2.579
*	56 Perylene-d12	264	18.149	18.143	(1.000)	482446	2.00000	
	63 Indeno(1,2,3-cd)pyrene	276	20.471	20.468	(1.128)	717401	2.60919	2.609
$	60 Dibenzo(a,h)anthracene-d14	292	Compound Not Detected.					
	62 Dibenzo(a,h)anthracene	278	20.475	20.465	(1.128)	585573	2.61501	2.615
	61 Benzo(g,h,i)perylene	276	21.352	21.342	(1.176)	633441	2.70805	2.708
	57 Perylene	252	18.225	18.215	(1.004)	580168	2.46677	2.467

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11161202.d
Lab Smp Id: ICV1115
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121116.b/FSIMPNA111512.m
Misc Info: 12-

Calibration Date: 16-NOV-2012
Calibration Time: 09:23
Client Smp ID: ICV1115
Level: LOW
Sample Type: WATER

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	553949	7.33
22 Acenaphthene-d10	284255	142128	568510	305185	7.36
28 Phenanthrene-d10	410660	205330	821320	428464	4.34
47 Chrysene-d12	467886	233943	935772	478871	2.35
56 Perylene-d12	472330	236165	944660	482446	2.14

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.47	4.97	5.97	5.47	0.00
22 Acenaphthene-d10	7.74	7.24	8.24	7.75	0.04
28 Phenanthrene-d10	9.76	9.26	10.26	9.76	0.03
47 Chrysene-d12	14.38	13.88	14.88	14.39	0.04
56 Perylene-d12	18.14	17.64	18.64	18.15	0.03

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: ICV1115
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcsw.spk
Sublist File: pnaf.sub
Method File: /chem3/nt11.i/20121116.b/FSIMPNA111512.m
Misc Info: 12-

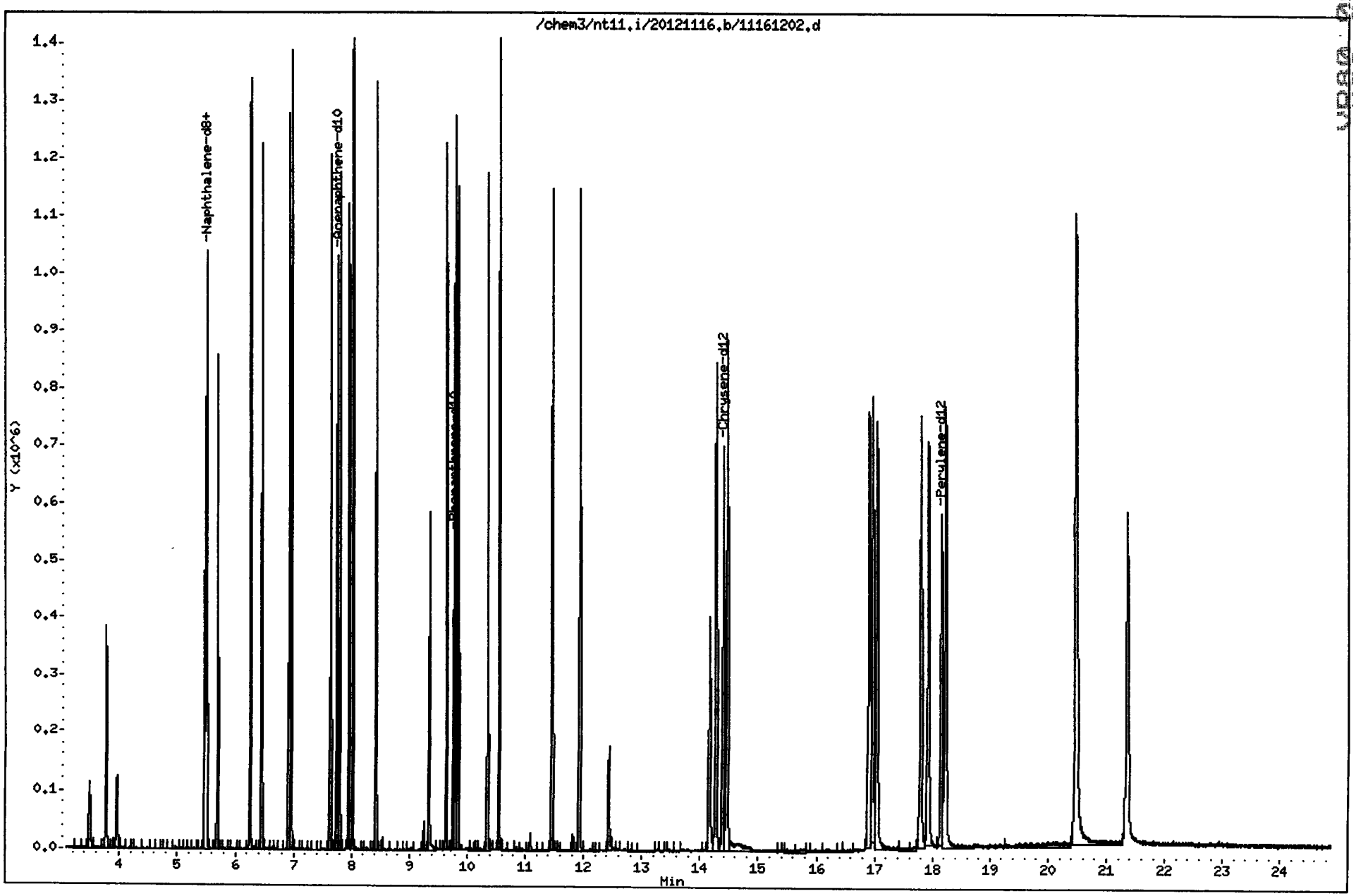
Client SDG: 20121116
Fraction: SV
Client Smp ID: ICV1115
Operator: JZ
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
7 Naphthalene	2.499	2.390	95.62	37-100
14 2-Methylnaphthalen	2.499	2.443	97.77	34-107
15 1-methylnaphthalen	2.499	2.428	97.17	30-160
21 Acenaphthylene	2.499	2.515	100.66	32-104
23 Acenaphthene	2.499	2.189	87.59	40-102
11 Dibenzofuran	2.499	2.394	95.79	44-104
25 Fluorene	2.499	2.445	97.82	43-114
30 Phenanthrene	2.499	2.415	96.62	43-116
31 Anthracene	2.499	2.441	97.67	30-121
36 Fluoranthene	2.499	2.463	98.58	46-138
39 Pyrene	2.499	2.537	101.52	47-124
46 Benzo(a)anthracene	2.499	2.484	99.40	38-134
48 Chrysene	2.499	2.496	99.87	52-112
51 Benzo(b)fluoranthe	2.499	2.593	103.75	49-123
52 Benzo(k)fluoranthe	2.499	2.507	100.31	50-127
54 Benzo(a)pyrene	2.499	2.579	103.20	24-118
63 Indeno(1,2,3-cd)py	2.499	2.609	104.41	32-123
62 Dibenzo(a,h)anthra	2.499	2.615	104.64	30-127
61 Benzo(g,h,i)peryle	2.499	2.708	108.37	26-124
57 Perylene	2.499	2.467	98.71	30-160

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 12 2-Methylnaphthale	2.499	0.000	*	33-107
$ 253 Fluoranthene-d10	2.499	0.000	*	40-140
$ 60 Dibenzo(a,h)anthr	2.499	0.000	*	10-142

Data File: /chem3/nt11.i/20121116.b/11161202.d
Date : 16-NOV-2012 08:51
Client ID: ICV1115
Sample Info: ICV1115
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: JZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - 11161202.d

Lab ID: ICV1115, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 16-NOV-2C

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

SIM PAH Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: VR80

GC/MS SVOA Analyst Notes / Corrective Action Log

ARI Project ID: VR80 Client ID: Anchor QEA, LLC

ARI SOP: (**801S**(SIM-PNA)) **802S**(Butyl Tins) **804S**(SVOA-8270D) **805S**(op-Pest)

Parameter(s): SimPNA

Instrument: NT-2 NT-4 NT-6 NT-8 (NT11)

Curve Date: 11/14/12 Analysis Start Date: 11/20/12

DFTPP Tune Meets Criteria?	(YES) / NO	Internal Standard Meets Criteria?	(YES) / NO
DDT Breakdown <20%?	(YES) / NO / NA	Method Blank In Control?	(YES) / NO
Peak Tailing Factor ≤2?	(YES) / NO / NA	LCS / LCSD Recovery In Control?	(YES) / NO
ICal acceptable?	(YES) / NO	CCal acceptable?	(YES) / NO
Q flag applied?	(YES) / NO	Q flag applied?	(YES) / NO
Surrogate Recovery in Control?	(YES) / NO	Special Analysis Criteria Met?	YES / NO / (NA)
Manual Integrations for ICal?	(YES) / NO	Manual Integrations for Samples?	Yes / (NO)

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Samples A-D + MB/LCS/LCSD

Forms included

Additional Details on Reverse: Yes / No

Analyst: [signature] **Date:** 11/20/12

Reviewer: [signature] **Date:** 11/20/12

Analytical Resources Inc.: Organics Instrument Log

NT-11 Serial No.:GC=US10140004, MS=US10481502

Date: 11/20/12 Analysis: SIM PAH Analyst: AR

GC Program: SIMPAH35 Column No: 114123 Column Type: RXi-17Sil MX

Instrument Tune (.U or .CT.): 120327 EM Voltage: 2400

Calibration File: 11201202 Curve Date: 11/14/12 Injection Vol.: 1 µl

IS/SS	Ical/Ccal	LCS/ICV
1998-3	2020-1	

Document All Maintenance Tasks In StarLIMS

INTERNAL STANDARD SUMMARY FOR DATABATCH - /chem3/nt11.i/20121120.b

	Time	Filename	LabID	ClientId	DF									
1	1207	11201201.d	DFTPP1120	DFTPP1120	1	NO ISTDS FOUND								
2	1231	11201202.d	CC1120	CC1120	1	5.44	632714	7.72	355653	9.74	513102	14.34	617135	18.10	629632
3	1310	11201203.d	VR80MBW1	VR80MBW1	1	5.43	654445	7.71	365629	9.73	528991	14.34	576730	18.10	525729
4	1340	11201204.d	VR80LCSW1	VR80LCSW1	1	5.43	661011	7.71	374905	9.73	539040	14.34	590855	18.10	549719
5	1410	11201205.d	VR80LCSDW1	VR80LCSDW1	1	5.43	677815	7.71	382722	9.73	548086	14.34	604613	18.10	560931
6	1440	11201206.d	VR80A	HT-01-W-C-12	1	5.43	649843	7.71	368699	9.73	526649	14.34	582917	18.10	546608
7	1510	11201207.d	VR80B	HT-04-W-C-12	1	5.43	686302	7.71	389999	9.73	549943	14.34	622005	18.10	576302
8	1540	11201208.d	VR80C	HT-04-W-C-du	1	5.43	666389	7.71	379382	9.73	537689	14.34	593787	18.10	564841
9	1610	11201209.d	VR80D	WS-10-W-C-12	1	5.43	679087	7.71	382162	9.73	550129	14.34	614288	18.10	565809
10	1640	11201210.d	VR38D	HT-04-S-C-12	1	5.44	641589	7.71	358015	9.74	498531	14.36	553225	18.11	636065

AR 11/20/12

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem3/nt11.i/20121120.b

ARI Job No.: CC11 Method: FSIMPNA111512.m Instrument: nt11.i Date: 20-NOV-2012

KZ 11/20/12.

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1231	11201202.d	CC1120	CC1120	1	NO MANUAL INTEGRATION
1310	11201203.d	VR80MBW1	VR80MBW1	1	NO MANUAL INTEGRATION
1340	11201204.d	VR80LCSW1	VR80LCSW1	1	NO MANUAL INTEGRATION
1410	11201205.d	VR80LCSDW1	VR80LCSDW1	1	NO MANUAL INTEGRATION
1440	11201206.d	VR80A	HT-01-W-C-	1	NO MANUAL INTEGRATION
1510	11201207.d	VR80B	HT-04-W-C-	1	NO MANUAL INTEGRATION
1540	11201208.d	VR80C	HT-04-W-C-	1	NO MANUAL INTEGRATION
1610	11201209.d	VR80D	WS-10-W-C-	1	NO MANUAL INTEGRATION

Q-FLAG SUMMARY FOR DATABATCH - /chem3/nt11.i/20121120.b

Instrument: nt11.i Date: 20-NOV-2012 Method: FSIMPNA111512.m

INITIAL CAL: 15-NOV-2012

Compound	%RSD or R^2
NO Q-FLAGS	

CONTINUING CAL: 20-NOV-2012

Compound	%D
NO Q-FLAGS	

11/28/12

Analytical Resources, Inc.

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: nt11.i Injection Date: 20-NOV-2012 12:31
Lab File ID: 11201202.d Init. Cal. Date(s): 15-NOV-2012 15-NOV-2012
Analysis Type: Init. Cal. Times: 18:53 21:24
Lab Sample ID: CC1120 Quant Type: ISTD
Method: /chem3/nt11.i/20121120.b/FSIMPNA111512.m

11/20/12

COMPOUND	RRF / AMOUNT	RF2	MIN RRF	%D / %DRIFT	MAX %D / %DRIFT	CURVE TYPE
7 Naphthalene	1.06886	1.02135	0.100	-4.44500	20.00000	Averaged
$ 12 2-Methylnaphthalene-d10	0.68335	0.67672	0.100	-0.97004	20.00000	Averaged
14 2-Methylnaphthalene	0.60223	0.59919	0.100	-0.50613	20.00000	Averaged
15 1-methylnaphthalene	0.57683	0.56329	0.100	-2.34667	20.00000	Averaged
21 Acenaphthylene	1.73788	1.77759	0.100	2.28512	20.00000	Averaged
23 Acenaphthene	1.10520	1.05630	0.100	-4.42397	20.00000	Averaged
11 Dibenzofuran	1.61909	1.53681	0.100	-5.08206	20.00000	Averaged
25 Fluorene	1.24435	1.25914	0.100	1.18793	20.00000	Averaged
30 Phenanthrene	1.20811	1.16192	0.100	-3.82281	20.00000	Averaged
31 Anthracene	1.15976	1.16182	0.100	0.17741	20.00000	Averaged
36 Fluoranthene	1.21040	1.22067	0.100	0.84863	20.00000	Averaged
39 Pyrene	1.10215	1.08552	0.100	-1.50859	20.00000	Averaged
46 Benzo(a)anthracene	1.00497	0.97370	0.100	-3.11175	20.00000	Averaged
48 Chrysene	0.97543	0.94286	0.100	-3.33876	20.00000	Averaged
51 Benzo(b)fluoranthene	0.92561	0.97310	0.100	5.13058	20.00000	Averaged
52 Benzo(k)fluoranthene	1.00524	1.03710	0.100	3.16931	20.00000	Averaged
251 Benzo(j)fluoranthene	1.06060	1.06172	0.100	0.10567	20.00000	Averaged
54 Benzo(a)pyrene	0.94018	0.94806	0.100	0.83849	20.00000	Averaged
63 Indeno(1,2,3-cd)pyrene	1.13982	1.24745	0.100	9.44224	20.00000	Averaged
$ 60 Dibenzo(a,h)anthracene-d14	0.66304	0.76925	0.100	16.01873	20.00000	Averaged
62 Dibenzo(a,h)anthracene	0.92830	1.02143	0.100	10.03165	20.00000	Averaged
61 Benzo(g,h,i)perylene	0.96969	1.07834	0.100	11.20554	20.00000	Averaged
57 Perylene	0.97501	0.94703	0.100	-2.86929	20.00000	Averaged

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121120.b/11201202.d
Lab Smp Id: CC1120 Client Smp ID: CC1120
Inj Date : 20-NOV-2012 12:31
Operator : JZ Inst ID: nt11.i
Smp Info : CC1120
Misc Info : 12-
Comment : 1ul Injection
Method : /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Meth Date : 20-Nov-2012 16:07 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 20:24 Cal File: 11151205.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

JZ 11/20/12

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
*	6 Naphthalene-d8	136	5.441	5.441	(1.000)	632714	2.00000	
	7 Naphthalene	128	5.470	5.470	(1.005)	807780	2.50000	2.389
$	12 2-Methylnaphthalene-d10	152	6.177	6.177	(1.135)	535211	2.50000	2.476
	14 2-Methylnaphthalene	141	6.224	6.224	(1.144)	473891	2.50000	2.487
	15 1-methylnaphthalene	141	6.416	6.416	(1.179)	445505	2.50000	2.441
	21 Acenaphthylene	152	7.603	7.603	(0.985)	790259	2.50000	2.557
*	22 Acenaphthene-d10	164	7.717	7.717	(1.000)	355653	2.00000	
	23 Acenaphthene	153	7.764	7.764	(1.006)	469598	2.50000	2.389
	11 Dibenzofuran	168	7.915	7.915	(1.026)	683215	2.50000	2.373
	25 Fluorene	166	8.392	8.392	(1.087)	559770	2.50000	2.530
*	28 Phenanthrene-d10	188	9.736	9.736	(1.000)	513102	2.00000	
	30 Phenanthrene	178	9.771	9.771	(1.004)	745232	2.50000	2.404
	31 Anthracene	178	9.812	9.812	(1.008)	745166	2.50000	2.504
	36 Fluoranthene	202	11.424	11.424	(1.173)	782912	2.50000	2.521
	39 Pyrene	202	11.891	11.891	(0.829)	837395	2.50000	2.462
	46 Benzo(a)anthracene	228	14.220	14.220	(0.991)	751131	2.50000	2.422
*	47 Chrysene-d12	240	14.343	14.343	(1.000)	617135	2.00000	
	48 Chrysene	228	14.409	14.409	(1.005)	727341	2.50000	2.417
	51 Benzo(b)fluoranthene	252	16.855	16.855	(0.931)	765868	2.50000	2.628
	52 Benzo(k)fluoranthene	252	16.912	16.912	(0.934)	816237	2.50000	2.579
	251 Benzo(j)fluoranthene	252	16.988	16.988	(0.939)	835618	2.50000	2.503
	54 Benzo(a)pyrene	252	17.871	17.871	(0.987)	746163	2.50000	2.521
*	56 Perylene-d12	264	18.098	18.098	(1.000)	629632	2.00000	
	63 Indeno(1,2,3-cd)pyrene	276	20.415	20.415	(1.128)	981789	2.50000	2.736
$	60 Dibenzo(a,h)anthracene-d14	292	20.323	20.323	(1.123)	605430	2.50000	2.900
	62 Dibenzo(a,h)anthracene	278	20.418	20.418	(1.128)	803903	2.50000	2.751
	61 Benzo(g,h,i)perylene	276	21.289	21.289	(1.176)	848700	2.50000	2.780

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
57 Perylene	252	18.171	18.171	(1.004)	745350	2.50000	2.428

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11201202.d
Lab Smp Id: CC1120
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-

Calibration Date: 20-NOV-2012
Calibration Time: 12:31
Client Smp ID: CC1120
Level:
Sample Type:

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	632714	22.59
22 Acenaphthene-d10	284255	142128	568510	355653	25.12
28 Phenanthrene-d10	410660	205330	821320	513102	24.95
47 Chrysene-d12	467886	233943	935772	617135	31.90
56 Perylene-d12	472330	236165	944660	629632	33.30

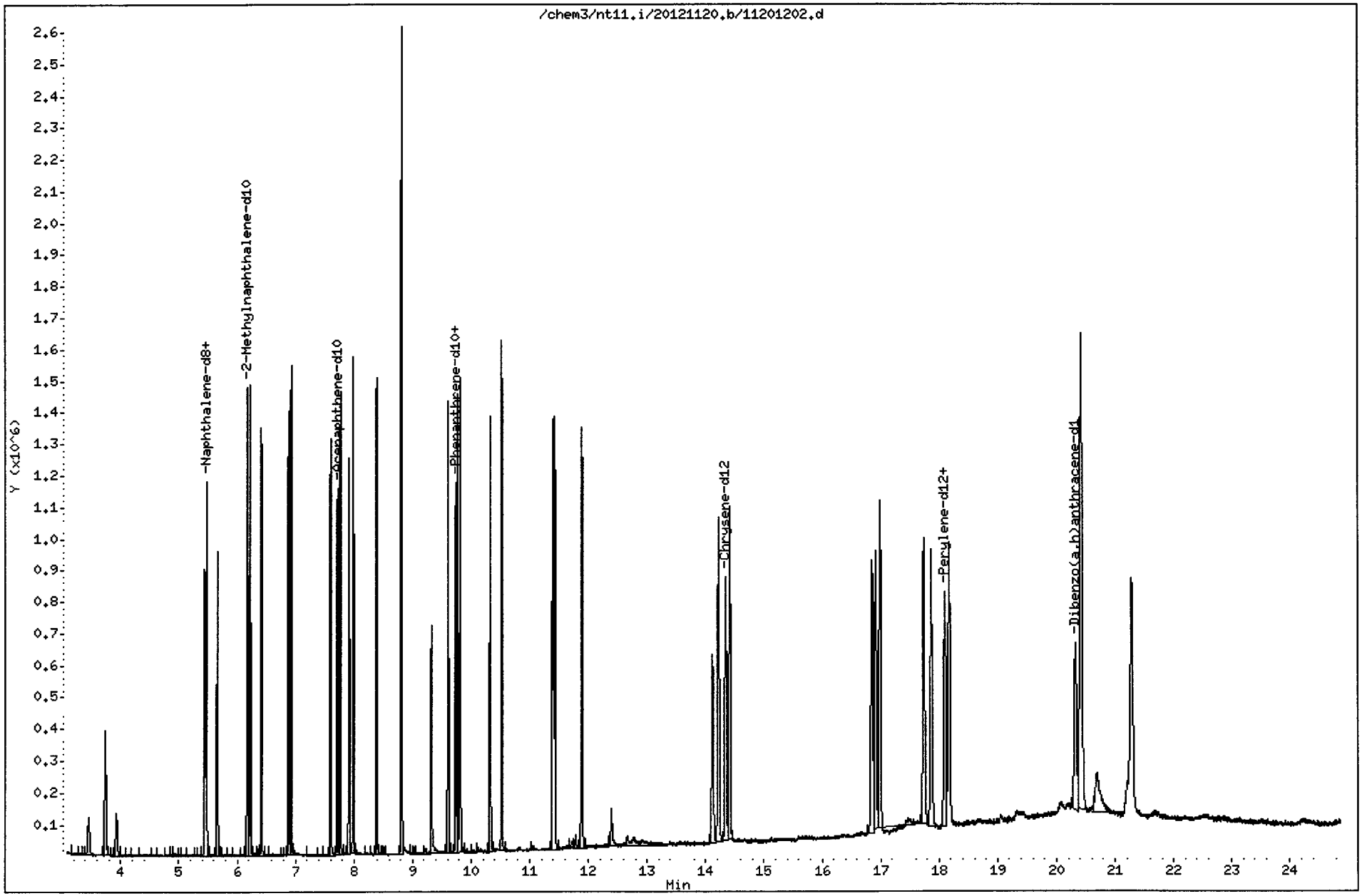
COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.44	4.94	5.94	5.44	0.00
22 Acenaphthene-d10	7.72	7.22	8.22	7.72	0.00
28 Phenanthrene-d10	9.74	9.24	10.24	9.74	0.00
47 Chrysene-d12	14.34	13.84	14.84	14.34	0.00
56 Perylene-d12	18.10	17.60	18.60	18.10	0.00

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

Data File: /chem3/nt11.i/20121120.b/11201202.d
Date : 20-NOV-2012 12:31
Client ID: CC1120
Sample Info: CC1120

Instrument: nt11.i
Operator: JZ
Column diameter: 0.25

Column phase: ZB-5msi



CO-ELUTION SUMMARY FOR FILE - 11201202.d

Lab ID: CC1120, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 20-NOV-201

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Data File: /chem3/nt11.i/20121120.b/tune.b/11201201.d

Date : 20-NOV-2012 12:07

Client ID: DFTPP1120

Instrument: nt11.i

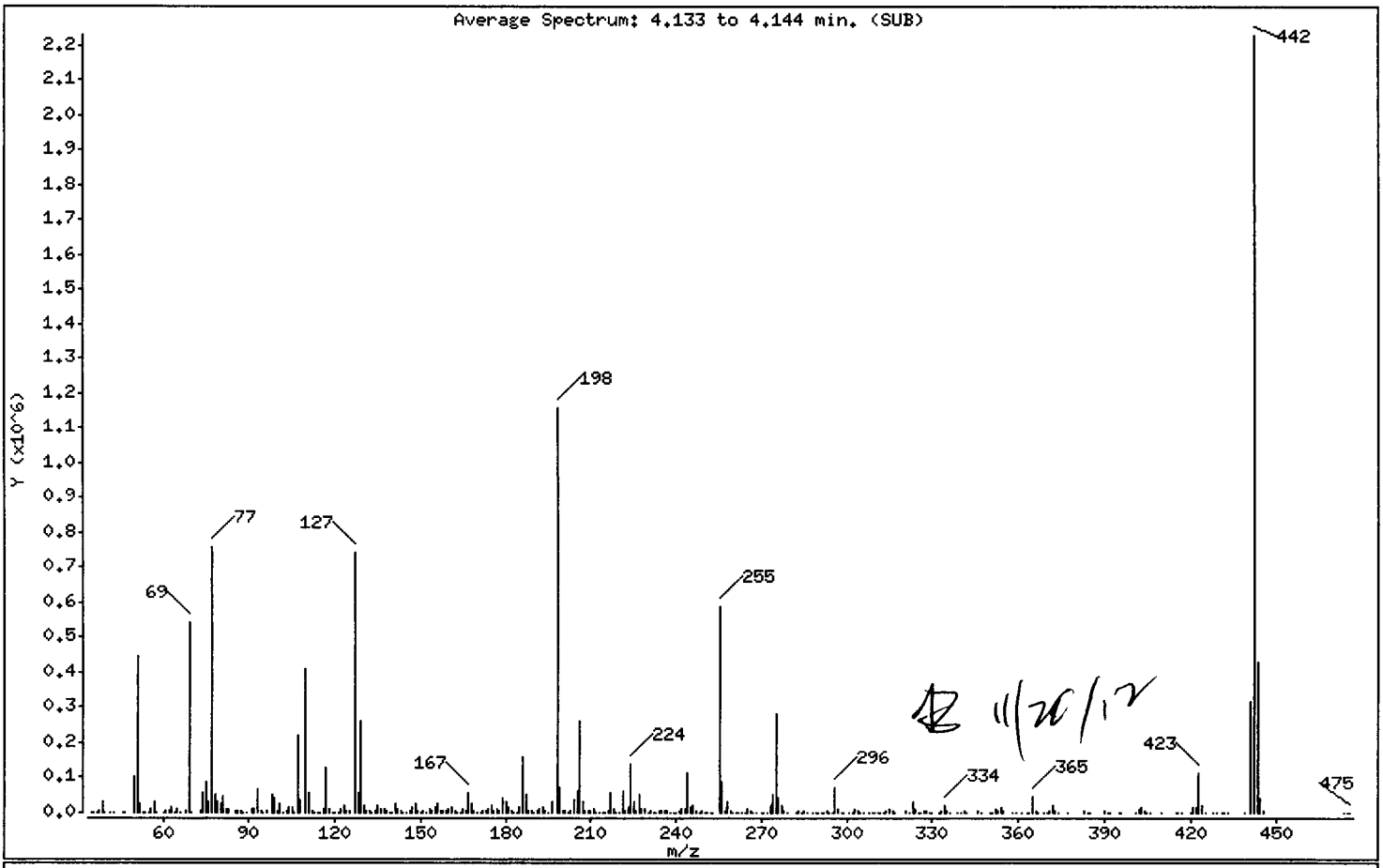
Sample Info: DFTPP1120

Operator: JZ

Column phase: Rxi-17silms

Column diameter: 0.25

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	38.29
68	Less than 2.00% of mass 69	0.39 (0.84)
69	Mass 69 relative abundance	46.82
70	Less than 2.00% of mass 69	0.20 (0.44)
127	10.00 - 80.00% of mass 198	64.22
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.34
275	10.00 - 60.00% of mass 198	24.18
365	Greater than 1.00% of mass 198	3.93
441	0.01 - 24.00% of mass 442	27.64 (14.36)
442	50.00 - 200.00% of mass 198	192.50
443	15.00 - 24.00% of mass 442	36.95 (19.20)

Date : 20-NOV-2012 12:07

Client ID: DFTPP1120 Instrument: nt11.i

Sample Info: DFTPP1120

Operator: JZ

Column phase: Rxi-17silms Column diameter: 0.25

Data File: 11201201.d
Spectrum: Average Spectrum: 4.133 to 4.144 min. (SUB)
Location of Maximum: 442.00
Number of points: 341

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	787	135.00	21472	222.00	2936	315.00	9236
36.00	180	136.00	7920	223.00	15157	316.00	5757
37.00	713	137.00	9110	224.00	138560	317.00	1007
38.00	5286	138.00	2858	225.00	33216	321.00	3222
39.00	32664	139.00	458	226.00	4538	322.00	1802
40.00	820	140.00	2495	227.00	49392	323.00	32504
42.00	1186	141.00	27992	228.00	8047	324.00	8235
43.00	385	142.00	10829	229.00	11008	325.00	846
46.00	221	143.00	6371	230.00	1578	326.00	373
47.00	140	144.00	560	231.00	3977	327.00	6442
50.00	104360	145.00	1555	232.00	871	328.00	3368
51.00	443264	146.00	6210	233.00	1047	329.00	856
52.00	23256	147.00	13902	234.00	4049	330.00	396
53.00	211	148.00	27616	235.00	3758	332.00	2558
54.00	521	149.00	6004	236.00	3522	333.00	3882
55.00	632	150.00	2551	237.00	4946	334.00	21784
56.00	11106	151.00	4660	238.00	278	335.00	5271
57.00	30464	152.00	590	239.00	2260	336.00	851
58.00	682	153.00	8515	240.00	1797	339.00	269
60.00	936	154.00	6079	241.00	3118	340.00	302
61.00	4509	155.00	17552	242.00	7978	341.00	4583
62.00	5971	156.00	23240	243.00	8726	342.00	1330
63.00	17872	157.00	4724	244.00	114480	346.00	4919
64.00	1784	158.00	4937	245.00	14691	347.00	1074
65.00	12364	159.00	3400	246.00	17952	350.00	177
66.00	792	160.00	8472	247.00	3927	351.00	712
68.00	4552	161.00	12962	248.00	1020	352.00	11027
69.00	542016	162.00	3910	249.00	5435	353.00	7053
70.00	2363	163.00	1389	250.00	868	354.00	14363
73.00	3248	164.00	1872	251.00	1052	355.00	2737
74.00	53992	165.00	7807	252.00	2222	358.00	228
75.00	88752	166.00	7426	253.00	2173	359.00	1899
76.00	32448	167.00	54064	255.00	590656	361.00	496
77.00	759808	168.00	25160	256.00	86472	363.00	202
78.00	50224	169.00	3747	257.00	6678	364.00	206

Data File: /chem3/nt11.i/20121120.b/tune.b/11201201.d

Date : 20-NOV-2012 12:07

Client ID: DFTPP1120 Instrument: nt11.i

Sample Info: DFTPP1120

Operator: JZ

Column phase: Rxi-17silms Column diameter: 0.25

Data File: 11201201.d
Spectrum: Average Spectrum: 4.133 to 4.144 min. (SUB)
Location of Maximum: 442.00
Number of points: 341

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	31072	170.00	2037	258.00	28632	365.00	45456
80.00	26840	171.00	1213	259.00	5718	366.00	6476
81.00	44712	172.00	3886	260.00	1322	367.00	257
82.00	10594	173.00	5185	261.00	1249	369.00	183
83.00	12081	174.00	11659	262.00	290	370.00	825
85.00	5747	175.00	22360	263.00	191	371.00	3676
86.00	6780	176.00	7609	264.00	1707	372.00	21376
87.00	5757	177.00	10749	265.00	10755	373.00	4731
88.00	2374	178.00	2929	266.00	3155	374.00	589
89.00	876	179.00	41792	267.00	678	377.00	714
91.00	9657	180.00	28928	268.00	250	383.00	7128
92.00	11868	181.00	13788	270.00	526	384.00	2042
93.00	64536	182.00	2608	271.00	1512	385.00	720
94.00	5053	183.00	2204	272.00	1250	390.00	2853
95.00	520	184.00	2180	273.00	18576	391.00	1665
96.00	3804	185.00	16616	274.00	52448	392.00	1694
98.00	49008	186.00	160384	275.00	279872	395.00	196
99.00	40776	187.00	49288	276.00	38752	396.00	192
100.00	2756	188.00	4601	277.00	22888	401.00	1975
101.00	27456	189.00	6824	278.00	3953	402.00	9782
102.00	1664	190.00	1310	279.00	1206	403.00	15349
103.00	7554	191.00	4148	282.00	781	404.00	5228
104.00	13250	192.00	12249	283.00	3399	405.00	645
105.00	14991	193.00	13057	284.00	1925	406.00	172
106.00	2173	194.00	3307	285.00	3984	410.00	590
107.00	218368	195.00	1956	286.00	1286	415.00	626
108.00	33416	196.00	31048	288.00	169	416.00	217
110.00	407616	198.00	1157632	289.00	1516	417.00	192
111.00	54760	199.00	73392	290.00	653	420.00	225
112.00	6848	200.00	5398	291.00	695	421.00	12917
113.00	437	201.00	5789	292.00	1494	422.00	14728
114.00	1199	202.00	1426	293.00	5260	423.00	114784
115.00	282	203.00	6593	294.00	1674	424.00	22408
116.00	10379	204.00	34792	295.00	745	425.00	2217
117.00	128744	205.00	60608	296.00	73864	428.00	209

Data File: /chem3/nt11.i/20121120.b/tune.b/11201201.d

Date : 20-NOV-2012 12:07

Client ID: DFTPP1120

Instrument: nt11.i

Sample Info: DFTPP1120

Operator: JZ

Column phase: Rxi-17silms

Column diameter: 0.25

Data File: 11201201.d

Spectrum: Average Spectrum: 4.133 to 4.144 min. (SUB)

Location of Maximum: 442.00

Number of points: 341

m/z	Y	m/z	Y	m/z	Y	m/z	Y
118.00	10256	206.00	260480	297.00	11120	429.00	167
119.00	1126	207.00	28400	298.00	481	431.00	639
120.00	1863	208.00	6455	299.00	313	432.00	230
121.00	1282	209.00	2966	301.00	1078	433.00	350
122.00	10258	210.00	5105	302.00	1901	439.00	324
123.00	18576	211.00	8453	303.00	9942	441.00	320000
124.00	6833	212.00	1697	304.00	3552	442.00	2228736
125.00	7397	213.00	967	305.00	288	443.00	427840
127.00	743488	214.00	641	306.00	209	444.00	41688
128.00	57520	215.00	2461	308.00	1260	445.00	3043
129.00	262400	216.00	5536	309.00	366	473.00	167
130.00	20520	217.00	58136	310.00	1354	474.00	187
131.00	3760	218.00	8657	311.00	288	475.00	215
132.00	2596	219.00	1221	312.00	438		
133.00	919	220.00	361	313.00	497		
134.00	5361	221.00	59640	314.00	4070		

Data File: /chem3/nt11.i/20121120.b/tune.b/11201201.d

Date : 20-NOV-2012 12:07

Client ID: DFTPP1120

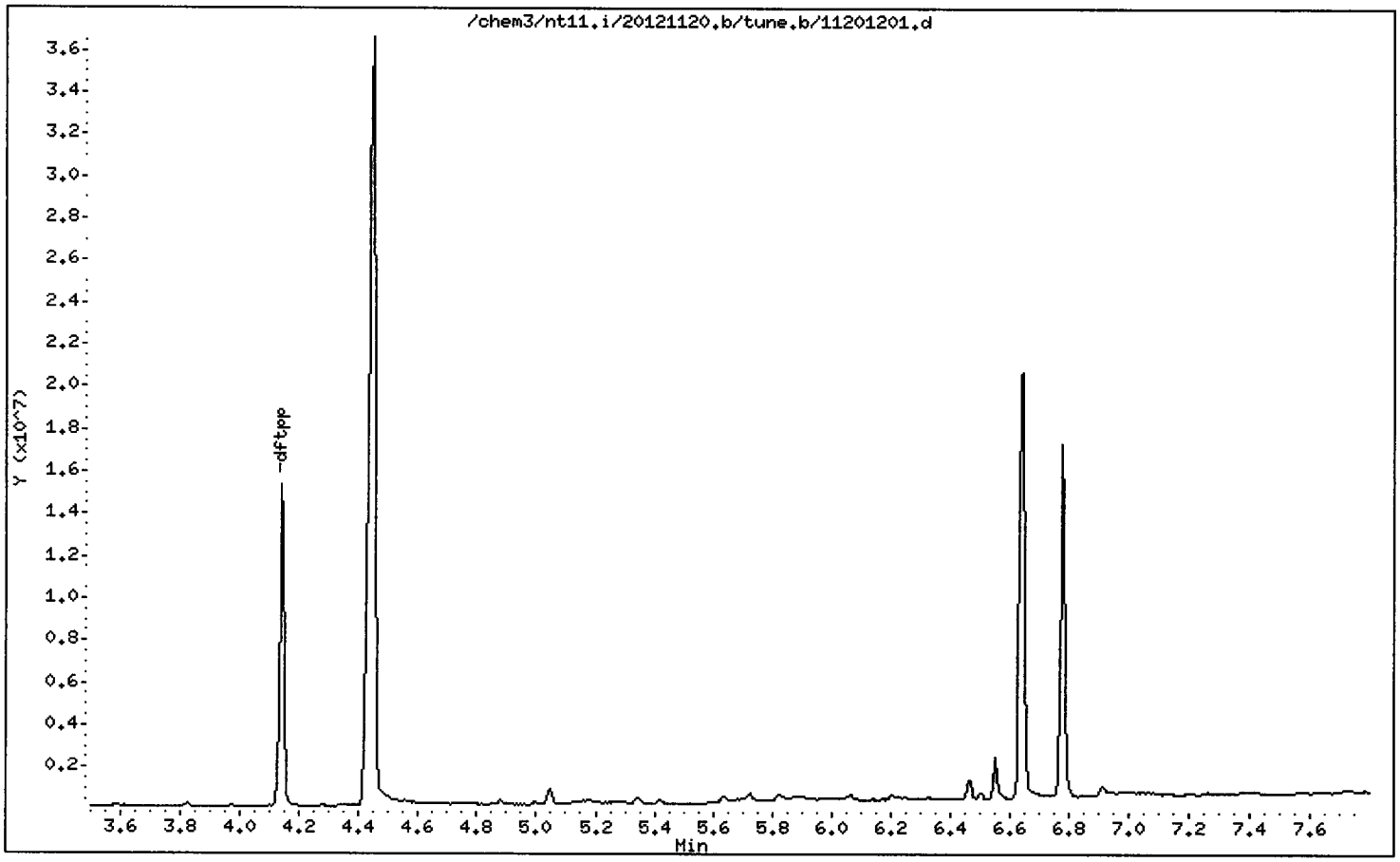
Instrument: nt11.i

Sample Info: DFTPP1120

Operator: JZ

Column phase: Rxi-17silms

Column diameter: 0.25



Analytical Resources Inc.
ABN by sw846 8270C
DDT Breakdown Report

Data file: /chem3/nt11.i/20121120.b/ddt.b/11201201.d ARI ID:
Method: /chem3/nt11.i/20121120.b/ddt.b/sw846ddt.m Misc:
Analysis Date: 20-NOV-2012 12:07 Instrument: nt11.i

COMPOUND	RT	AREA
Pentachlorophenol	4.449	6863376
Benzidine	6.644	8966792
4,4'-DDE	6.067	23126
4,4'-DDD	6.554	370458
4,4'-DDT	6.778	3265811

$$\text{DDT Percent Breakdown} = \frac{(\text{DDE Area} + \text{DDD Area}) * 100}{(\text{DDE Area} + \text{DDD Area} + \text{DDT Area})}$$

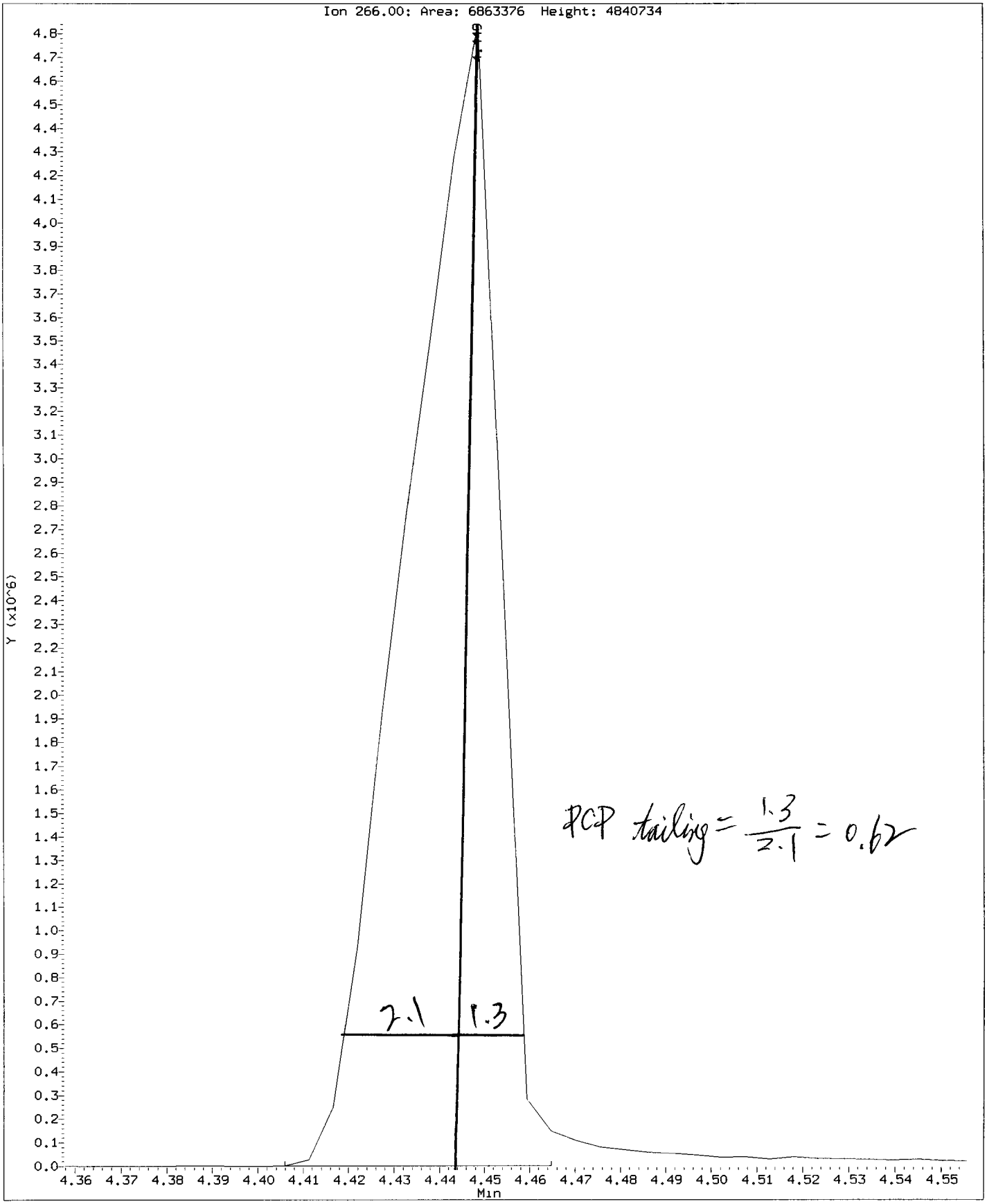
$$\text{DDT Percent Breakdown} = \frac{(\ 23126 + 370458) * 100}{(\ 23126 + 370458 + 3265811)}$$

DDT Percent Breakdown = 10.8 %

11/20/12

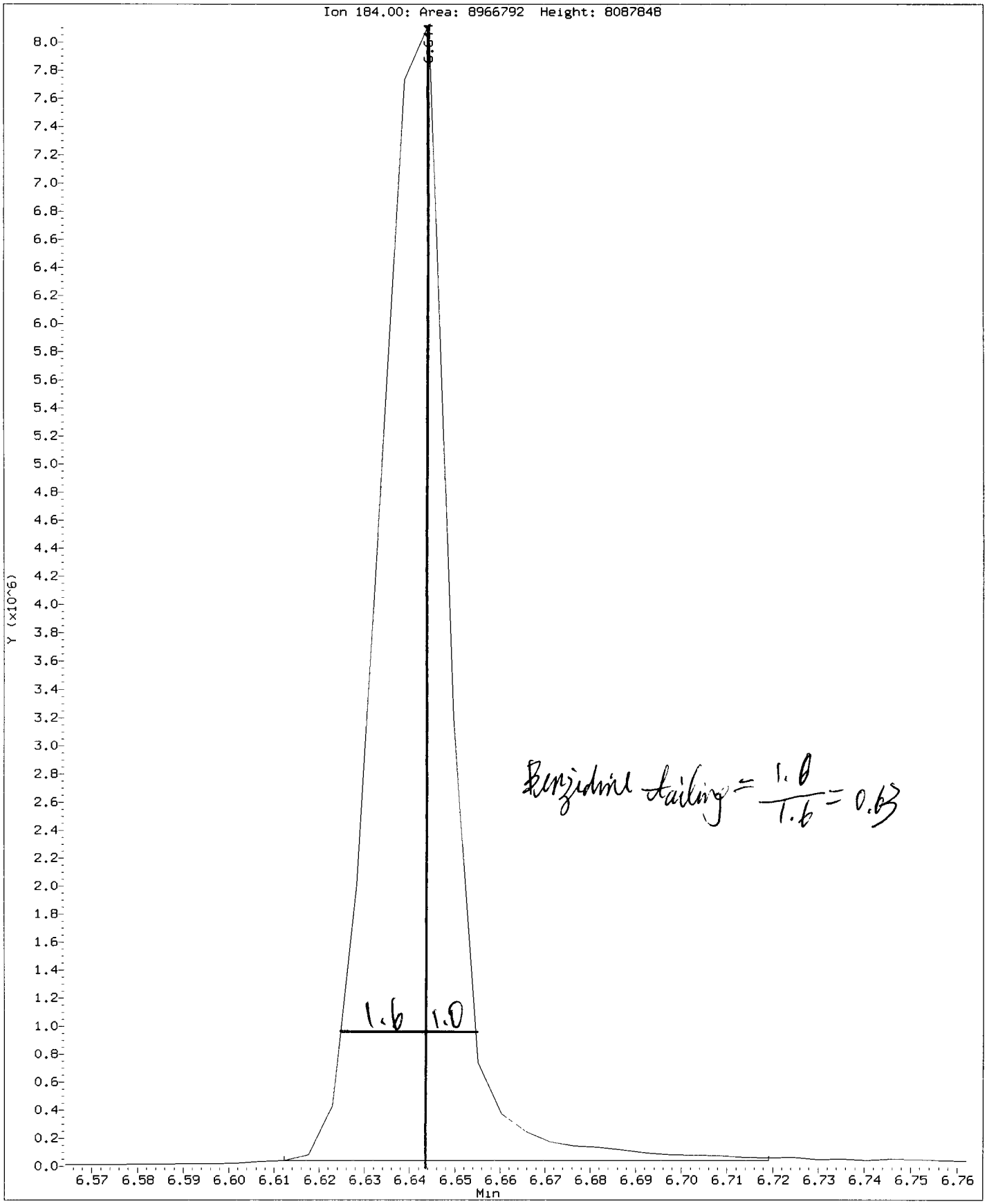
Data File: /chem3/nt11.i/20121120.b/ddt.b/11201201.d
Injection Date: 20-NOV-2012 12:07
Instrument: nt11.i
Client Sample ID: DDT1120

Compound: Pentachlorophenol
CAS Number: 87-86-5



Data File: /chem3/nt11.i/20121120.b/ddt.b/11201201.d
Injection Date: 20-NOV-2012 12:07
Instrument: nt11.i
Client Sample ID: DDT1120

Compound: Benzidine
CAS Number:



Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121120.b/11201206.d
Lab Smp Id: VR80A Client Smp ID: HT-01-W-C-121107
Inj Date : 20-NOV-2012 14:40
Operator : JZ Inst ID: nt11.i
Smp Info : VR80A
Misc Info : 12-22456
Comment : 1ul Injection
Method : /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Meth Date : 20-Nov-2012 16:14 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 20:24 Cal File: 11151205.d
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

11/20/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

		QUANT SIG					CONCENTRATIONS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/L)
*	6 Naphthalene-d8	136	5.429	5.441	(1.000)	649843	2.00000	
	7 Naphthalene	128	Compound Not Detected.					
$	12 2-Methylnaphthalene-d10	152	6.167	6.177	(1.136)	365762	1.64732	1.647
	14 2-Methylnaphthalene	141	Compound Not Detected.					
	15 1-methylnaphthalene	141	Compound Not Detected.					
	21 Acenaphthylene	152	Compound Not Detected.					
*	22 Acenaphthene-d10	164	7.707	7.717	(1.000)	368699	2.00000	
	23 Acenaphthene	153	Compound Not Detected.					
	11 Dibenzofuran	168	Compound Not Detected.					
	25 Fluorene	166	Compound Not Detected.					
*	28 Phenanthrene-d10	188	9.730	9.736	(1.000)	526649	2.00000	
	30 Phenanthrene	178	Compound Not Detected.					
	31 Anthracene	178	Compound Not Detected.					
	36 Fluoranthene	202	Compound Not Detected.					
	39 Pyrene	202	Compound Not Detected.					
	46 Benzo(a)anthracene	228	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
*	47 Chrysene-d12	240	14.340	14.343	(1.000)	582917	2.00000	
	48 Chrysene	228	Compound Not Detected.					
	51 Benzo(b)fluoranthene	252	Compound Not Detected.					
	52 Benzo(k)fluoranthene	252	Compound Not Detected.					
	251 Benzo(j)fluoranthene	252	Compound Not Detected.					
	54 Benzo(a)pyrene	252	Compound Not Detected.					
*	56 Perylene-d12	264	18.099	18.098	(1.000)	546608	2.00000	
	63 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	60 Dibenzo(a,h)anthracene-d14	292	20.330	20.323	(1.123)	348322	1.92219	1.922
	62 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	61 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	57 Perylene	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11201206.d
Lab Smp Id: VR80A
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22456

Calibration Date: 20-NOV-2012
Calibration Time: 12:31
Client Smp ID: HT-01-W-C-121107
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	649843	25.91
22 Acenaphthene-d10	284255	142128	568510	368699	29.71
28 Phenanthrene-d10	410660	205330	821320	526649	28.24
47 Chrysene-d12	467886	233943	935772	582917	24.59
56 Perylene-d12	472330	236165	944660	546608	15.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.44	4.94	5.94	5.43	-0.23
22 Acenaphthene-d10	7.72	7.22	8.22	7.71	-0.12
28 Phenanthrene-d10	9.74	9.24	10.24	9.73	-0.06
47 Chrysene-d12	14.34	13.84	14.84	14.34	-0.02
56 Perylene-d12	18.10	17.60	18.60	18.10	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

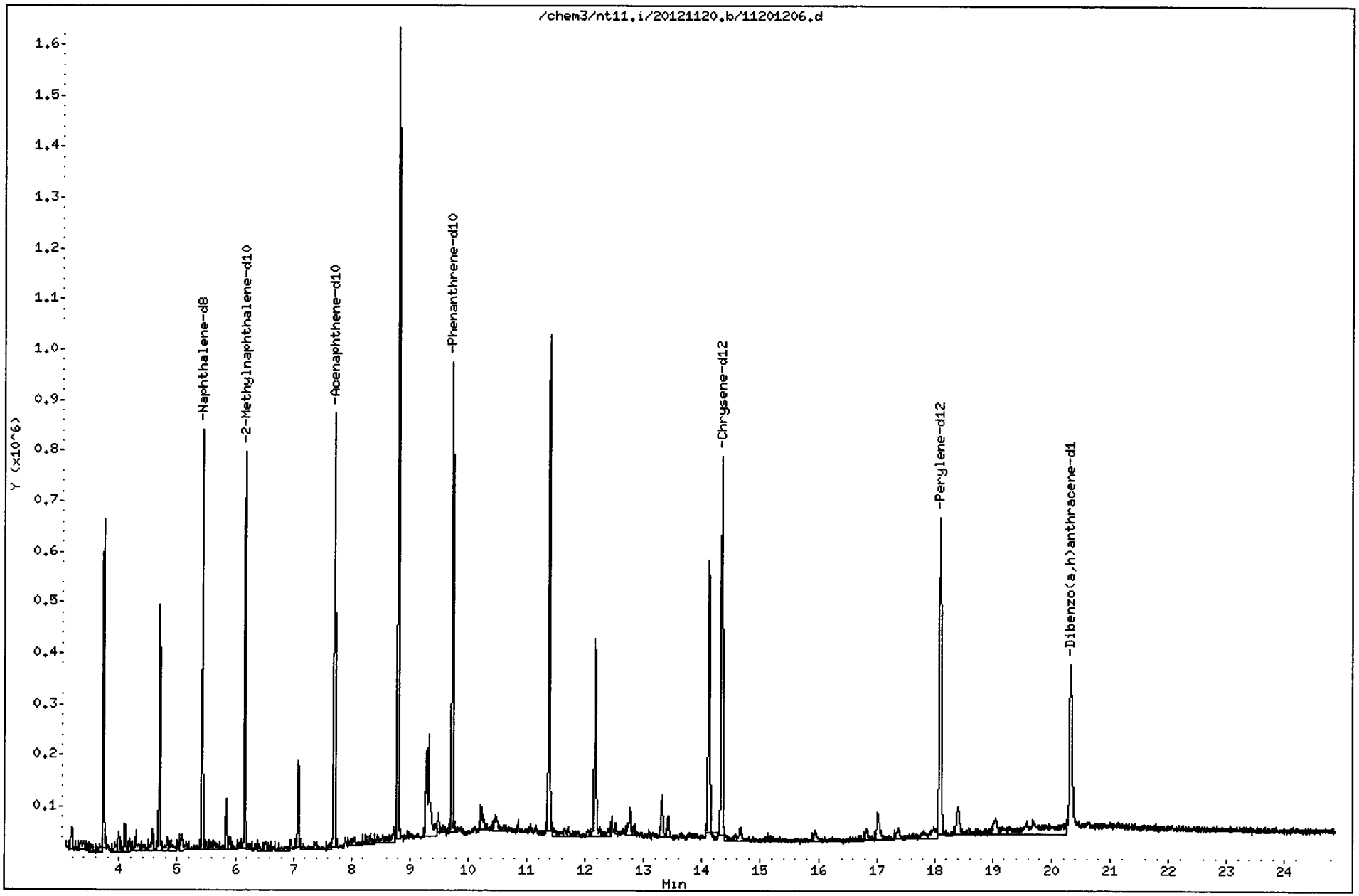
Client Name: Anchor QEA, LLC
Sample Matrix: LIQUID
Lab Smp Id: VR80A
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcsw.spk
Sublist File: pnax.sub
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22456

Client SDG: VR80
Fraction: SV
Client Smp ID: HT-01-W-C-121107
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 12 2-Methylnaphthalen	3.000	1.647	54.91	33-107
$ 60 Dibenzo(a,h)anthra	3.000	1.922	64.07	10-142

Data File: /chem3/nt11.i/20121120.b/11201206.d
Date : 20-NOV-2012 14:40
Client ID: HT-01-W-C-121107
Sample Info: VR80A
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: JZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - 11201206.d

Lab ID: VR80A, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 20-NOV-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121120.b/11201207.d
Lab Smp Id: VR80B Client Smp ID: HT-04-W-C-121107
Inj Date : 20-NOV-2012 15:10
Operator : JZ Inst ID: nt11.i
Smp Info : VR80B
Misc Info : 12-22457
Comment : 1ul Injection
Method : /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Meth Date : 20-Nov-2012 16:14 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 20:24 Cal File: 11151205.d
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

11/20/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
* 6 Naphthalene-d8	136	5.429	5.441	(1.000)	686302	2.00000	
7 Naphthalene	128	Compound Not Detected.					
$ 12 2-Methylnaphthalene-d10	152	6.167	6.177	(1.136)	330810	1.41076	1.411
14 2-Methylnaphthalene	141	Compound Not Detected.					
15 1-methylnaphthalene	141	Compound Not Detected.					
21 Acenaphthylene	152	Compound Not Detected.					
* 22 Acenaphthene-d10	164	7.707	7.717	(1.000)	389999	2.00000	
23 Acenaphthene	153	Compound Not Detected.					
11 Dibenzofuran	168	Compound Not Detected.					
25 Fluorene	166	Compound Not Detected.					
* 28 Phenanthrene-d10	188	9.730	9.736	(1.000)	549943	2.00000	
30 Phenanthrene	178	Compound Not Detected.					
31 Anthracene	178	Compound Not Detected.					
36 Fluoranthene	202	Compound Not Detected.					
39 Pyrene	202	Compound Not Detected.					
46 Benzo(a)anthracene	228	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
*	47 Chrysene-d12	240	14.337	14.343	(1.000)	622005	2.00000	
	48 Chrysene	228	Compound Not Detected.					
	51 Benzo(b)fluoranthene	252	Compound Not Detected.					
	52 Benzo(k)fluoranthene	252	Compound Not Detected.					
	251 Benzo(j)fluoranthene	252	Compound Not Detected.					
	54 Benzo(a)pyrene	252	Compound Not Detected.					
*	56 Perylene-d12	264	18.098	18.098	(1.000)	576302	2.00000	
	63 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	60 Dibenzo(a,h)anthracene-d14	292	20.326	20.323	(1.123)	464947	2.43357	2.434
	62 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	61 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	57 Perylene	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11201207.d
Lab Smp Id: VR80B
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22457

Calibration Date: 20-NOV-2012
Calibration Time: 12:31
Client Smp ID: HT-04-W-C-121107
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	686302	32.98
22 Acenaphthene-d10	284255	142128	568510	389999	37.20
28 Phenanthrene-d10	410660	205330	821320	549943	33.92
47 Chrysene-d12	467886	233943	935772	622005	32.94
56 Perylene-d12	472330	236165	944660	576302	22.01

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.44	4.94	5.94	5.43	-0.23
22 Acenaphthene-d10	7.72	7.22	8.22	7.71	-0.12
28 Phenanthrene-d10	9.74	9.24	10.24	9.73	-0.06
47 Chrysene-d12	14.34	13.84	14.84	14.34	-0.04
56 Perylene-d12	18.10	17.60	18.60	18.10	0.00

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

Analytical Resources, Inc.

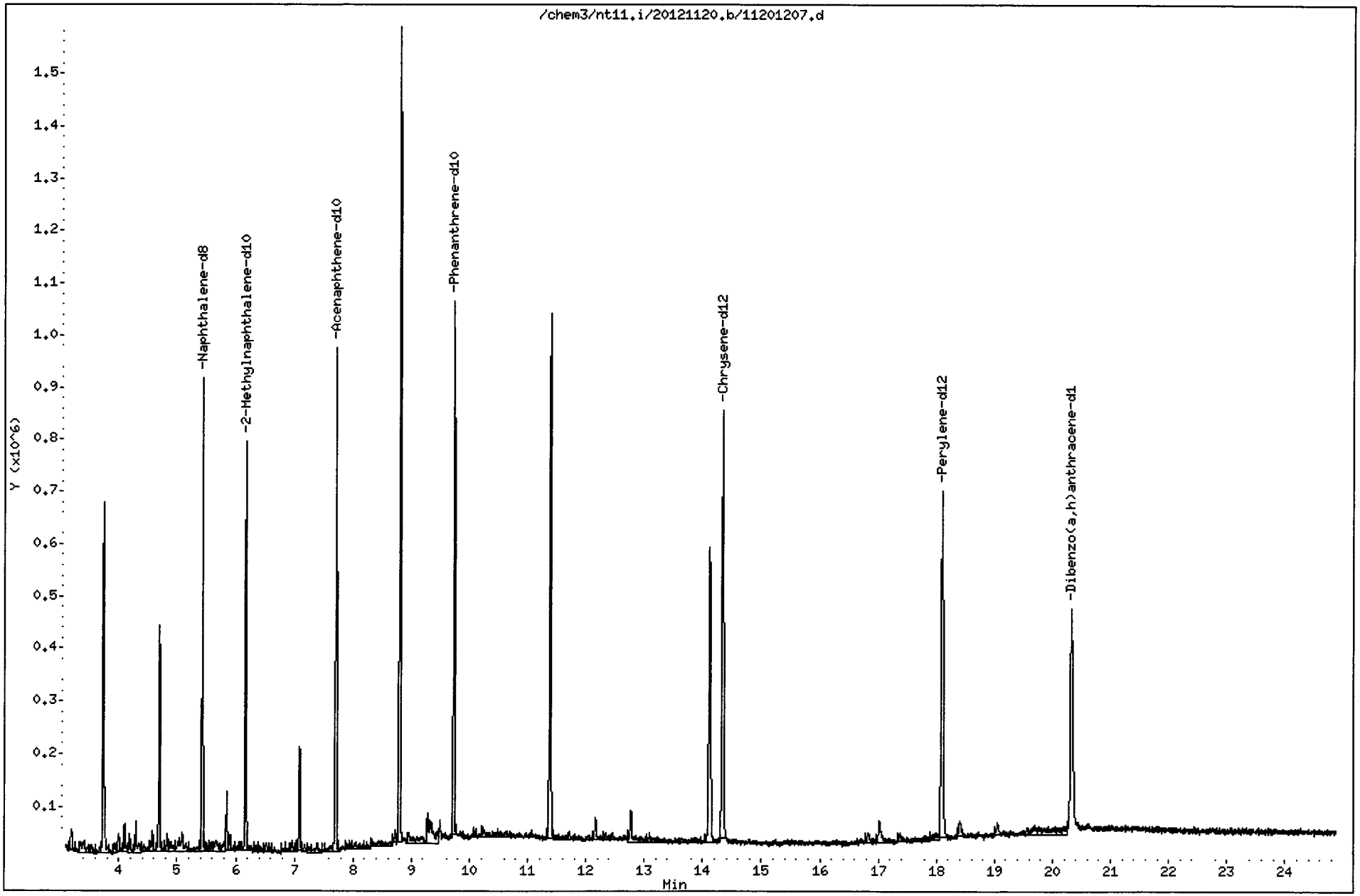
RECOVERY REPORT

Client Name: Anchor QEA, LLC
Client SDG: VR80
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: VR80B
Client Smp ID: HT-04-W-C-121107
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: SAMPLE
SpikeList File: pnalcsw.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22457

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 12 2-Methylnaphthalen	3.000	1.411	47.03	33-107
$ 60 Dibenzo(a,h)anthra	3.000	2.434	81.12	10-142

Data File: /chem3/nt11.i/20121120.b/11201207.d
Date : 20-NOV-2012 15:10
Client ID: HT-04-W-C-121107
Sample Info: VR80B
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: JZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - 11201207.d

Lab ID: VR80B, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 20-NOV-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121120.b/11201208.d
Lab Smp Id: VR80C Client Smp ID: HT-04-W-C-dup-12110
Inj Date : 20-NOV-2012 15:40
Operator : JZ Inst ID: nt11.i
Smp Info : VR80C
Misc Info : 12-22458
Comment : 1ul Injection
Method : /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Meth Date : 20-Nov-2012 16:14 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 20:24 Cal File: 11151205.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

11/20/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
*	6 Naphthalene-d8	136	5.429	5.441	(1.000)	666389	2.00000	
	7 Naphthalene	128	Compound Not Detected.					
$	12 2-Methylnaphthalene-d10	152	6.167	6.177	(1.136)	344459	1.51286	1.513
	14 2-Methylnaphthalene	141	Compound Not Detected.					
	15 1-methylnaphthalene	141	Compound Not Detected.					
	21 Acenaphthylene	152	Compound Not Detected.					
*	22 Acenaphthene-d10	164	7.707	7.717	(1.000)	379382	2.00000	
	23 Acenaphthene	153	Compound Not Detected.					
	11 Dibenzofuran	168	Compound Not Detected.					
	25 Fluorene	166	Compound Not Detected.					
*	28 Phenanthrene-d10	188	9.730	9.736	(1.000)	537689	2.00000	
	30 Phenanthrene	178	Compound Not Detected.					
	31 Anthracene	178	Compound Not Detected.					
	36 Fluoranthene	202	Compound Not Detected.					
	39 Pyrene	202	Compound Not Detected.					
	46 Benzo(a)anthracene	228	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
*	47 Chrysene-d12	240	14.340	14.343	(1.000)	593787	2.00000	
	48 Chrysene	228	Compound Not Detected.					
	51 Benzo(b)fluoranthene	252	Compound Not Detected.					
	52 Benzo(k)fluoranthene	252	Compound Not Detected.					
	251 Benzo(j)fluoranthene	252	Compound Not Detected.					
	54 Benzo(a)pyrene	252	Compound Not Detected.					
*	56 Perylene-d12	264	18.099	18.098	(1.000)	564841	2.00000	
	63 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	60 Dibenzo(a,h)anthracene-d14	292	20.326	20.323	(1.123)	510373	2.72554	2.726
	62 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	61 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	57 Perylene	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11201208.d
Lab Smp Id: VR80C
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22458

Calibration Date: 20-NOV-2012
Calibration Time: 12:31
Client Smp ID: HT-04-W-C-dup-12
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	666389	29.12
22 Acenaphthene-d10	284255	142128	568510	379382	33.47
28 Phenanthrene-d10	410660	205330	821320	537689	30.93
47 Chrysene-d12	467886	233943	935772	593787	26.91
56 Perylene-d12	472330	236165	944660	564841	19.59

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.44	4.94	5.94	5.43	-0.23
22 Acenaphthene-d10	7.72	7.22	8.22	7.71	-0.12
28 Phenanthrene-d10	9.74	9.24	10.24	9.73	-0.06
47 Chrysene-d12	14.34	13.84	14.84	14.34	-0.02
56 Perylene-d12	18.10	17.60	18.60	18.10	0.00

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

Analytical Resources, Inc.

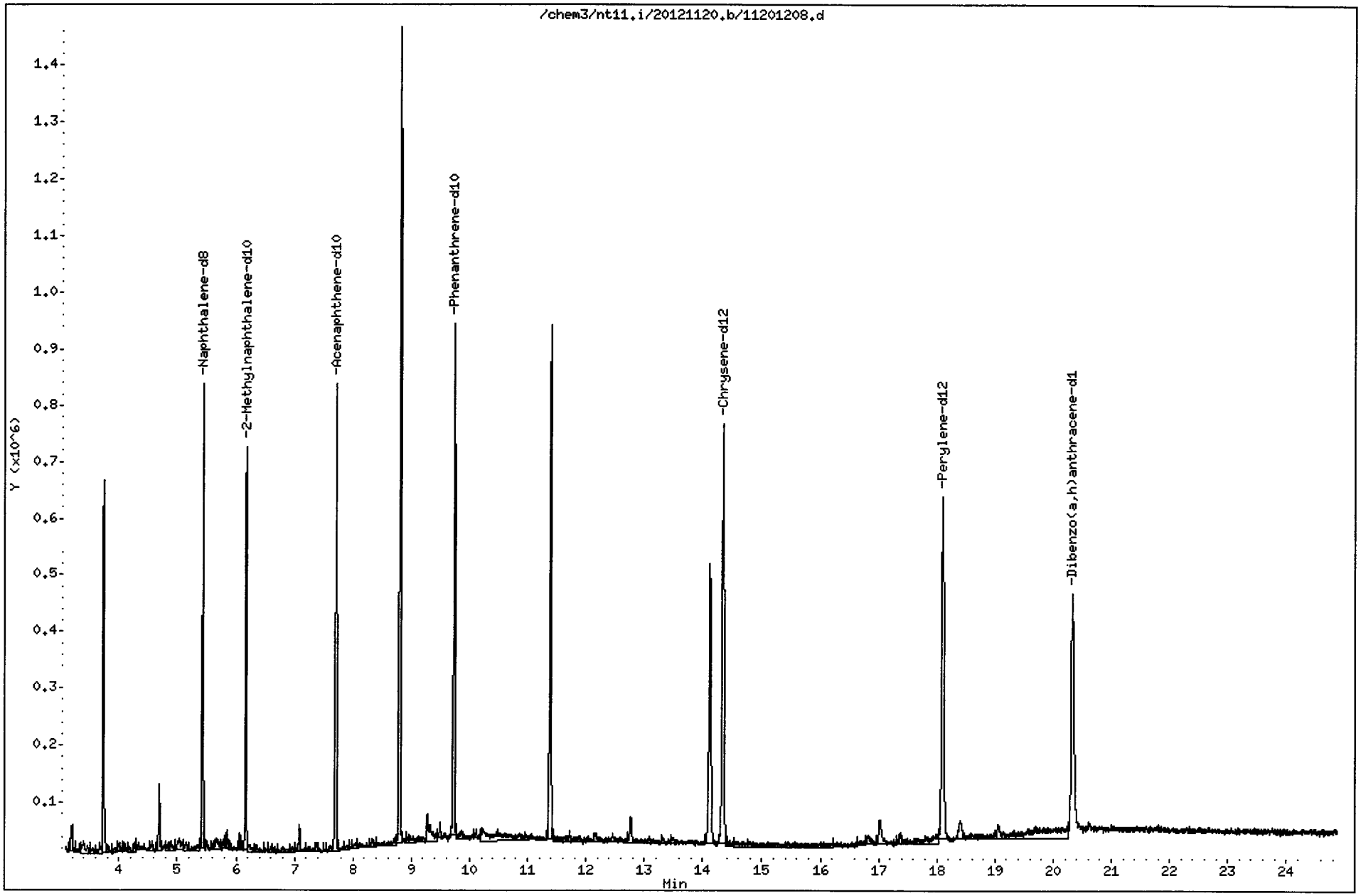
RECOVERY REPORT

Client Name: Anchor QEA, LLC
Sample Matrix: LIQUID
Lab Smp Id: VR80C
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcsw.spk
Sublist File: pnax.sub
Client SDG: VR80
Fraction: SV
Client Smp ID: HT-04-W-C-dup-12110
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22458

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 12 2-Methylnaphthalen	3.000	1.513	50.43	33-107
$ 60 Dibenzo(a,h)anthra	3.000	2.726	90.85	10-142

Data File: /chem3/nt11.i/20121120.b/11201208.d
Date : 20-NOV-2012 15:40
Client ID: HT-04-W-C-dup-12110
Sample Info: VR80C
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: JZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - 11201208.d

Lab ID: VR80C, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 20-NOV-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121120.b/11201209.d
Lab Smp Id: VR80D Client Smp ID: WS-10-W-C-121107
Inj Date : 20-NOV-2012 16:10
Operator : JZ Inst ID: nt11.i
Smp Info : VR80D
Misc Info : 12-22459
Comment : 1ul Injection
Method : /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Meth Date : 20-Nov-2012 16:14 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 20:24 Cal File: 11151205.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
*	6	Naphthalene-d8	136	5.432	5.441	(1.000)	679087	2.00000	
	7	Naphthalene	128	Compound Not Detected.					
$	12	2-Methylnaphthalene-d10	152	6.167	6.177	(1.135)	352674	1.51998	1.520
	14	2-Methylnaphthalene	141	Compound Not Detected.					
	15	1-methylnaphthalene	141	Compound Not Detected.					
	21	Acenaphthylene	152	Compound Not Detected.					
*	22	Acenaphthene-d10	164	7.707	7.717	(1.000)	382162	2.00000	
	23	Acenaphthene	153	Compound Not Detected.					
	11	Dibenzofuran	168	Compound Not Detected.					
	25	Fluorene	166	Compound Not Detected.					
*	28	Phenanthrene-d10	188	9.730	9.736	(1.000)	550129	2.00000	
	30	Phenanthrene	178	Compound Not Detected.					
	31	Anthracene	178	Compound Not Detected.					
	36	Fluoranthene	202	Compound Not Detected.					
	39	Pyrene	202	Compound Not Detected.					
	46	Benzo(a)anthracene	228	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
*	47 Chrysene-d12	240	14.340	14.343	(1.000)	614288	2.00000	
	48 Chrysene	228	Compound Not Detected.					
	51 Benzo(b)fluoranthene	252	Compound Not Detected.					
	52 Benzo(k)fluoranthene	252	Compound Not Detected.					
	251 Benzo(j)fluoranthene	252	Compound Not Detected.					
	54 Benzo(a)pyrene	252	Compound Not Detected.					
*	56 Perylene-d12	264	18.095	18.098	(1.000)	565809	2.00000	
	63 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	60 Dibenzo(a,h)anthracene-d14	292	20.330	20.323	(1.123)	524403	2.79567	2.796
	62 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	61 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	57 Perylene	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11201209.d
Lab Smp Id: VR80D
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22459

Calibration Date: 20-NOV-2012
Calibration Time: 12:31
Client Smp ID: WS-10-W-C-121107
Level: LOW
Sample Type: Water

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	679087	31.58
22 Acenaphthene-d10	284255	142128	568510	382162	34.44
28 Phenanthrene-d10	410660	205330	821320	550129	33.96
47 Chrysene-d12	467886	233943	935772	614288	31.29
56 Perylene-d12	472330	236165	944660	565809	19.79

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.44	4.94	5.94	5.43	-0.17
22 Acenaphthene-d10	7.72	7.22	8.22	7.71	-0.12
28 Phenanthrene-d10	9.74	9.24	10.24	9.73	-0.06
47 Chrysene-d12	14.34	13.84	14.84	14.34	-0.02
56 Perylene-d12	18.10	17.60	18.60	18.10	-0.02

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

Analytical Resources, Inc.

RECOVERY REPORT

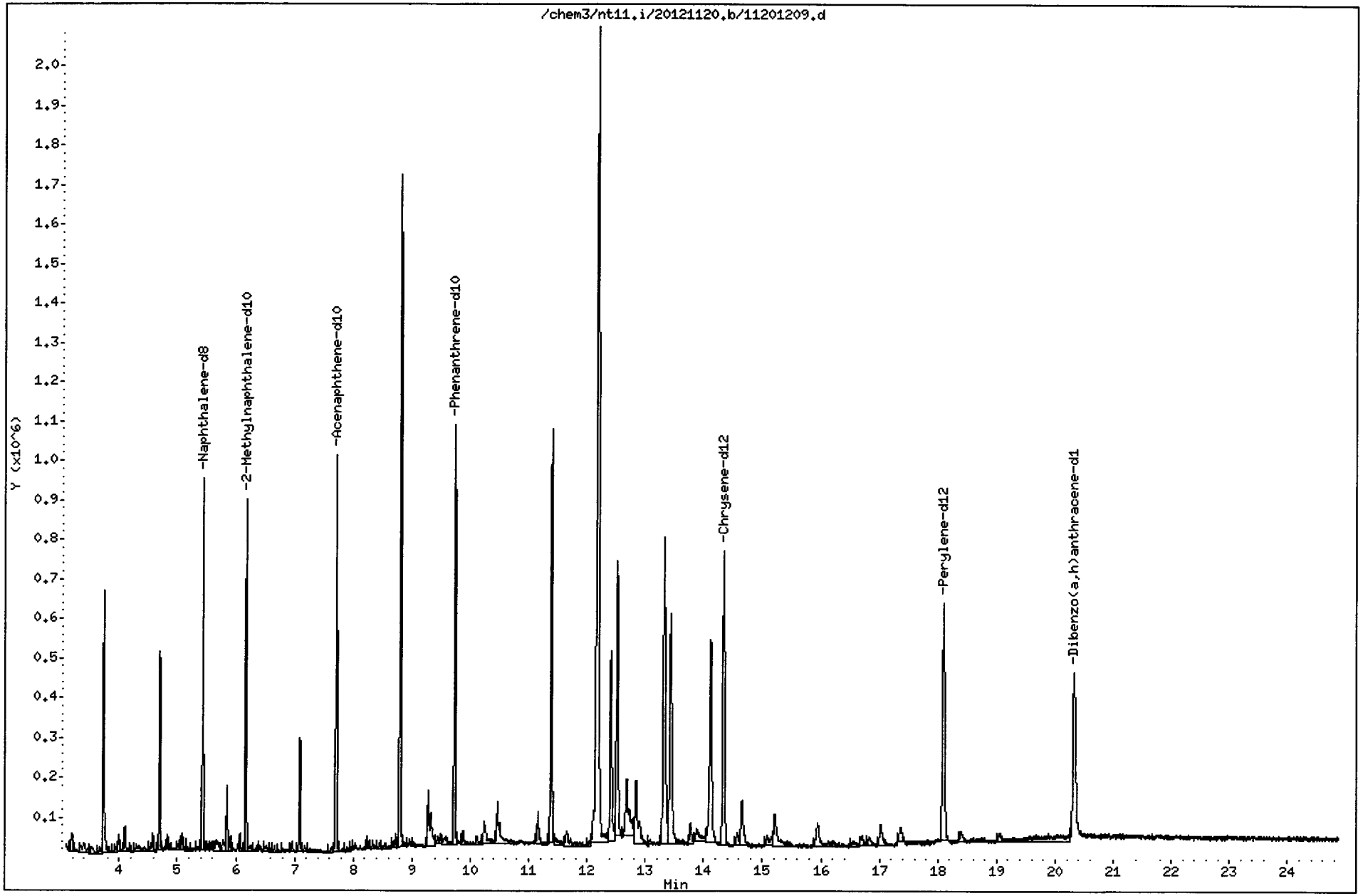
Client Name: Anchor QEA, LLC
Sample Matrix: LIQUID
Lab Smp Id: VR80D
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcsw.spk
Sublist File: pnax.sub
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22459

Client SDG: VR80
Fraction: SV
Client Smp ID: WS-10-W-C-121107
Operator: JZ
SampleType: SAMPLE
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 12 2-Methylnaphthalen	3.000	1.520	50.67	33-107
$ 60 Dibenzo(a,h)anthra	3.000	2.796	93.19	10-142

Data File: /chem3/nt11.i/20121120.b/11201209.d
Date : 20-NOV-2012 16:10
Client ID: WS-10-W-C-121107
Sample Info: VR80D
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: JZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - 11201209.d

Lab ID: VR80D, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 20-NOV-2012

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121120.b/11201203.d
Lab Smp Id: VR80MBW1 Client Smp ID: VR80MBW1
Inj Date : 20-NOV-2012 13:10
Operator : JZ Inst ID: nt11.i
Smp Info : VR80MBW1,
Misc Info : 12-22456
Comment : 1ul Injection
Method : /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Meth Date : 20-Nov-2012 16:07 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 20:24 Cal File: 11151205.d
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable JZ 11/20/12

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
*	6 Naphthalene-d8	136	5.432	5.441	(1.000)	654445	2.00000	
	7 Naphthalene	128	Compound Not Detected.					
$	12 2-Methylnaphthalene-d10	152	6.171	6.177	(1.136)	352867	1.57808	1.578
	14 2-Methylnaphthalene	141	Compound Not Detected.					
	15 1-methylnaphthalene	141	Compound Not Detected.					
	21 Acenaphthylene	152	Compound Not Detected.					
*	22 Acenaphthene-d10	164	7.710	7.717	(1.000)	365629	2.00000	
	23 Acenaphthene	153	Compound Not Detected.					
	11 Dibenzofuran	168	Compound Not Detected.					
	25 Fluorene	166	Compound Not Detected.					
*	28 Phenanthrene-d10	188	9.733	9.736	(1.000)	528991	2.00000	
	30 Phenanthrene	178	Compound Not Detected.					
	31 Anthracene	178	Compound Not Detected.					
	36 Fluoranthene	202	Compound Not Detected.					
	39 Pyrene	202	Compound Not Detected.					
	46 Benzo(a)anthracene	228	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
*	47 Chrysene-d12	240	14.340	14.343	(1.000)	576730	2.00000	
	48 Chrysene	228	Compound Not Detected.					
	51 Benzo(b)fluoranthene	252	Compound Not Detected.					
	52 Benzo(k)fluoranthene	252	Compound Not Detected.					
	251 Benzo(j)fluoranthene	252	Compound Not Detected.					
	54 Benzo(a)pyrene	252	Compound Not Detected.					
*	56 Perylene-d12	264	18.099	18.098	(1.000)	525729	2.00000	
	63 Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
$	60 Dibenzo(a,h)anthracene-d14	292	20.330	20.323	(1.123)	537645	3.08478	3.085
	62 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	61 Benzo(g,h,i)perylene	276	Compound Not Detected.					
	57 Perylene	252	Compound Not Detected.					

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11201203.d
Lab Smp Id: VR80MBW1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22456

Calibration Date: 20-NOV-2012
Calibration Time: 12:31
Client Smp ID: VR80MBW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	654445	26.80
22 Acenaphthene-d10	284255	142128	568510	365629	28.63
28 Phenanthrene-d10	410660	205330	821320	528991	28.81
47 Chrysene-d12	467886	233943	935772	576730	23.26
56 Perylene-d12	472330	236165	944660	525729	11.31

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.44	4.94	5.94	5.43	-0.17
22 Acenaphthene-d10	7.72	7.22	8.22	7.71	-0.08
28 Phenanthrene-d10	9.74	9.24	10.24	9.73	-0.03
47 Chrysene-d12	14.34	13.84	14.84	14.34	-0.02
56 Perylene-d12	18.10	17.60	18.60	18.10	0.00

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

Analytical Resources, Inc.

RECOVERY REPORT

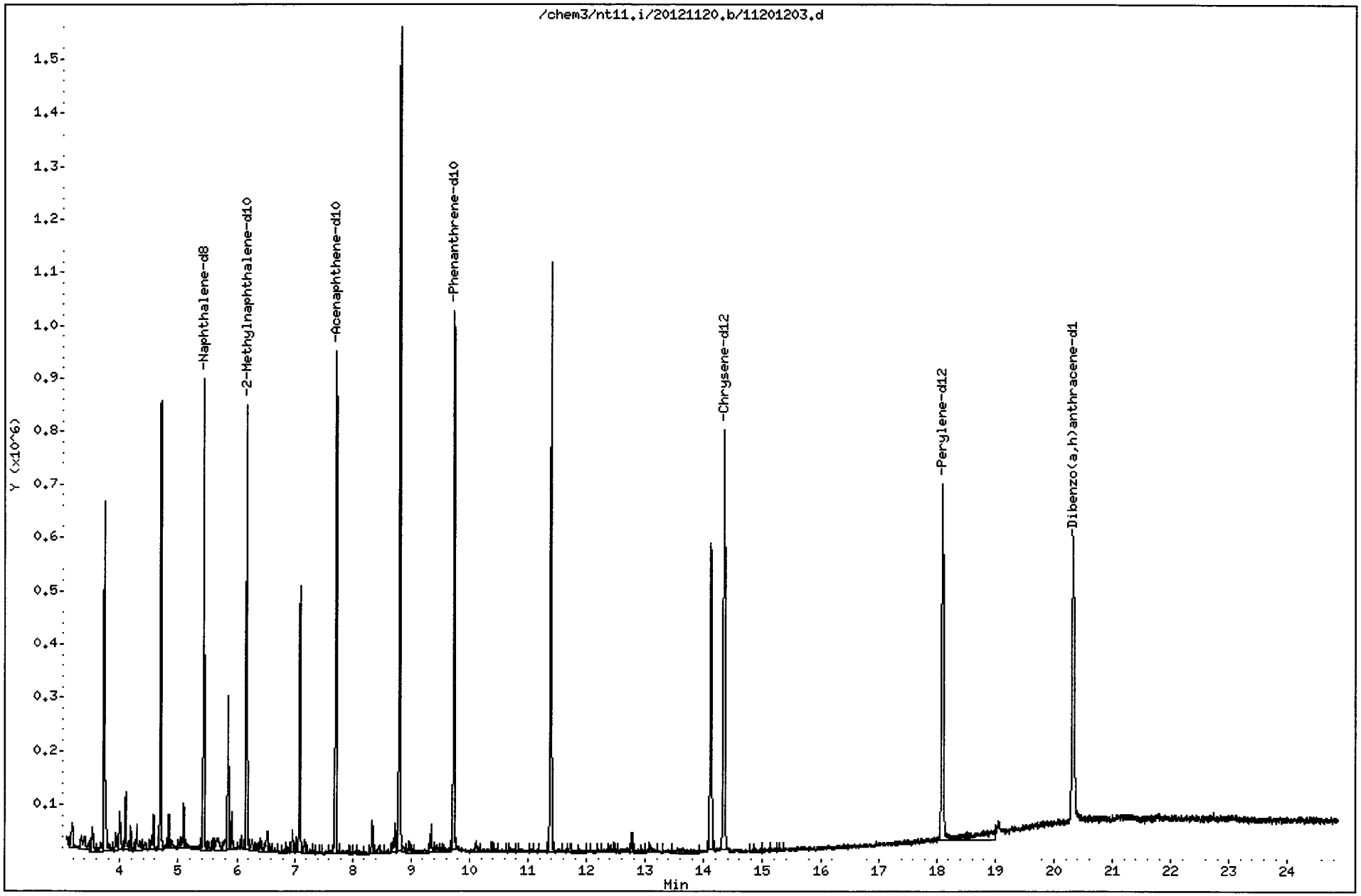
Client Name: Anchor QEA, LLC
Sample Matrix: LIQUID
Lab Smp Id: VR80MBW1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcsw.spk
Sublist File: pnax.sub
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22456

Client SDG: VR80
Fraction: SV
Client Smp ID: VR80MBW1
Operator: JZ
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 12 2-Methylnaphthalen	3.000	1.578	52.60	33-107
$ 60 Dibenzo(a,h)anthra	3.000	3.085	102.83	10-142

Data File: /chem3/nt11.i/20121120.b/11201203.d
Date : 20-NOV-2012 13:10
Client ID: VR80MBW1
Sample Info: VR80MBW1,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: JZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - 11201203.d

Lab ID: VR80MBW1, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 20-NOV-2

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121120.b/11201204.d
Lab Smp Id: VR80LCSW1 Client Smp ID: VR80LCSW1
Inj Date : 20-NOV-2012 13:40
Operator : JZ Inst ID: nt11.i
Smp Info : VR80LCSW1,
Misc Info : 12-22456
Comment : 1ul Injection
Method : /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Meth Date : 20-Nov-2012 16:07 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 20:24 Cal File: 11151205.d
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

11/20/12

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/L)
*	6 Naphthalene-d8	136	5.429	5.441	(1.000)	661011	2.00000	
	7 Naphthalene	128	5.457	5.470	(1.005)	640881	1.81416	1.814
$	12 2-Methylnaphthalene-d10	152	6.167	6.177	(1.136)	386315	1.71050	1.710
	14 2-Methylnaphthalene	141	6.215	6.224	(1.145)	354283	1.77995	1.780
	15 1-methylnaphthalene	141	6.407	6.416	(1.180)	369277	1.93698	1.937
	21 Acenaphthylene	152	7.597	7.603	(0.986)	561230	1.72278	1.723
*	22 Acenaphthene-d10	164	7.707	7.717	(1.000)	374905	2.00000	
	23 Acenaphthene	153	7.758	7.764	(1.007)	402852	1.94452	1.945
	11 Dibenzofuran	168	7.909	7.915	(1.026)	554981	1.82858	1.829
	25 Fluorene	166	8.382	8.392	(1.088)	494455	2.11978	2.120
*	28 Phenanthrene-d10	188	9.730	9.736	(1.000)	539040	2.00000	
	30 Phenanthrene	178	9.765	9.771	(1.004)	732896	2.25085	2.251
	31 Anthracene	178	9.806	9.812	(1.008)	593946	1.90014	1.900
	36 Fluoranthene	202	11.421	11.424	(1.174)	788767	2.41784	2.418
	39 Pyrene	202	11.885	11.891	(0.829)	792221	2.43307	2.433
	46 Benzo(a)anthracene	228	14.220	14.220	(0.991)	681368	2.29497	2.295

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
* 47 Chrysene-d12	240	14.343	14.343	(1.000)	590855	2.00000	
48 Chrysene	228	14.410	14.409	(1.005)	705527	2.44832	2.448
51 Benzo(b)fluoranthene	252	16.858	16.855	(0.931)	745051	2.92851	2.929
52 Benzo(k)fluoranthene	252	16.918	16.912	(0.935)	748825	2.71019	2.710
251 Benzo(j)fluoranthene	252	16.991	16.988	(0.939)	632993	2.17138	2.171
54 Benzo(a)pyrene	252	17.871	17.871	(0.987)	510800	1.97665	1.977
* 56 Perylene-d12	264	18.102	18.098	(1.000)	549719	2.00000	
63 Indeno(1,2,3-cd)pyrene	276	20.427	20.415	(1.128)	795517	2.53923	2.539
$ 60 Dibenzo(a,h)anthracene-d14	292	20.333	20.323	(1.123)	435246	2.38828	2.388
62 Dibenzo(a,h)anthracene	278	20.427	20.418	(1.128)	581675	2.27971	2.280
61 Benzo(g,h,i)perylene	276	21.295	21.289	(1.176)	691832	2.59572	2.596
57 Perylene	252	18.171	18.171	(1.004)	627205	2.34041	2.340

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11201204.d
Lab Smp Id: VR80LCSW1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22456

Calibration Date: 20-NOV-2012
Calibration Time: 12:31
Client Smp ID: VR80LCSW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	661011	28.08
22 Acenaphthene-d10	284255	142128	568510	374905	31.89
28 Phenanthrene-d10	410660	205330	821320	539040	31.26
47 Chrysene-d12	467886	233943	935772	590855	26.28
56 Perylene-d12	472330	236165	944660	549719	16.38

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.44	4.94	5.94	5.43	-0.23
22 Acenaphthene-d10	7.72	7.22	8.22	7.71	-0.12
28 Phenanthrene-d10	9.74	9.24	10.24	9.73	-0.06
47 Chrysene-d12	14.34	13.84	14.84	14.34	0.00
56 Perylene-d12	18.10	17.60	18.60	18.10	0.02

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

Analytical Resources, Inc.

RECOVERY REPORT

Client Name: Anchor QEA, LLC
Sample Matrix: LIQUID
Lab Smp Id: VR80LCSW1
Level: LOW
Data Type: MS DATA
SpikeList File: pnalcsw.spk
Sublist File: pnax.sub
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22456

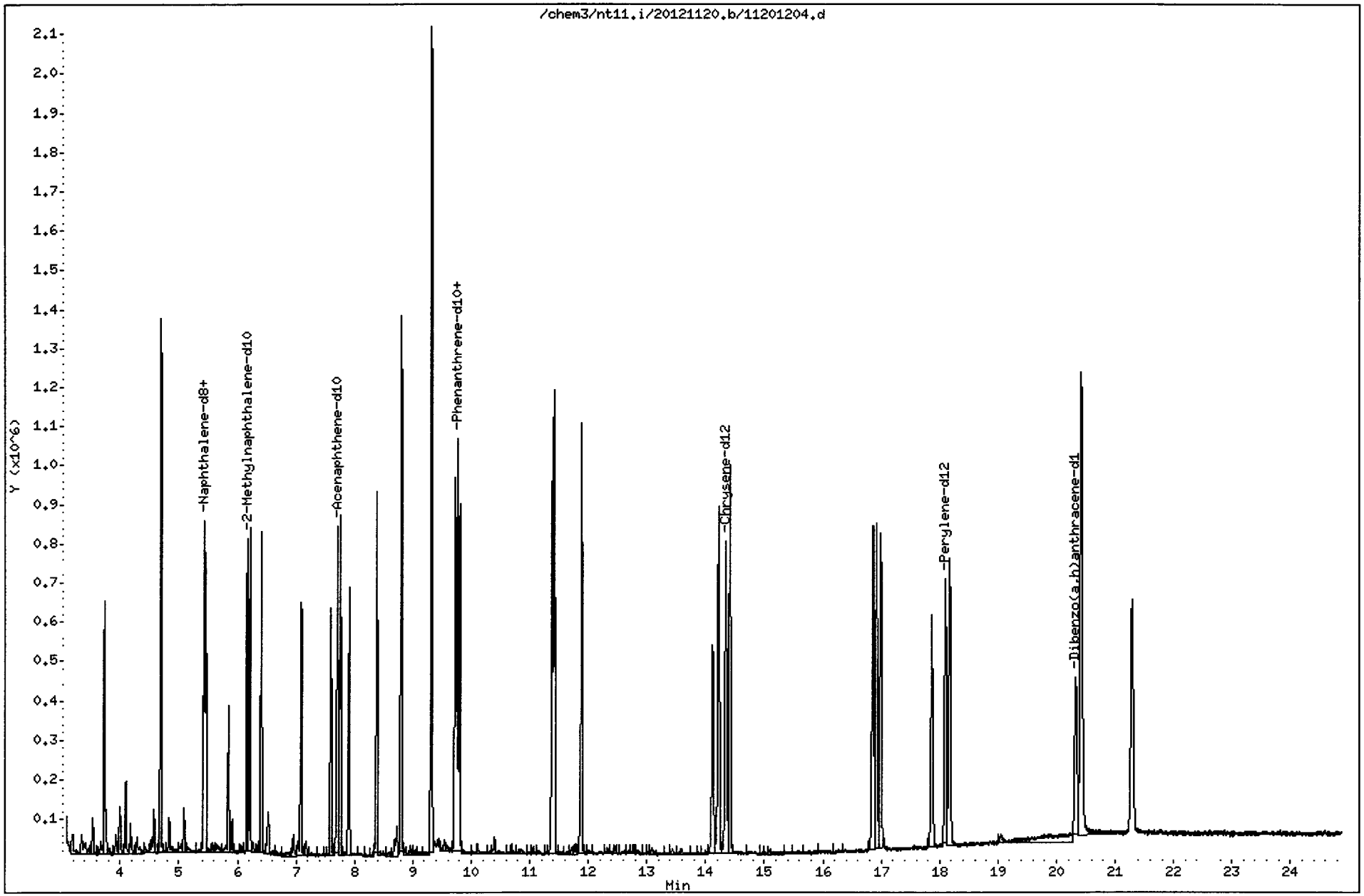
Client SDG: VR80
Fraction: SV
Client Smp ID: VR80LCSW1
Operator: JZ
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
7 Naphthalene	3.000	1.814	60.47	37-100
14 2-Methylnaphthalen	3.000	1.780	59.33	34-107
15 1-methylnaphthalen	3.000	1.937	64.57	30-160
21 Acenaphthylene	3.000	1.723	57.43	32-104
23 Acenaphthene	3.000	1.945	64.82	40-102
11 Dibenzofuran	3.000	1.829	60.95	44-104
25 Fluorene	3.000	2.120	70.66	43-114
30 Phenanthrene	3.000	2.251	75.03	43-116
31 Anthracene	3.000	1.900	63.34	30-121
36 Fluoranthene	3.000	2.418	80.59	46-138
39 Pyrene	3.000	2.433	81.10	47-124
46 Benzo(a)anthracene	3.000	2.295	76.50	38-134
48 Chrysene	3.000	2.448	81.61	52-112
51 Benzo(b)fluoranthe	3.000	2.929	97.62	49-123
52 Benzo(k)fluoranthe	3.000	2.710	90.34	50-127
54 Benzo(a)pyrene	3.000	1.977	65.89	24-118
63 Indeno(1,2,3-cd)py	3.000	2.539	84.64	32-123
62 Dibenzo(a,h)anthra	3.000	2.280	75.99	30-127
61 Benzo(g,h,i)peryle	3.000	2.596	86.52	26-124
57 Perylene	3.000	2.340	78.01	30-160

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 12 2-Methylnaphthalen	3.000	1.710	57.02	33-107
$ 60 Dibenzo(a,h)anthra	3.000	2.388	79.61	10-142

Data File: /chem3/nt11.i/20121120.b/11201204.d
Date : 20-NOV-2012 13:40
Client ID: VR80LCSW1
Sample Info: VR80LCSW1,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: JZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - 11201204.d

Lab ID: VR80LCSW1, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 20-NOV-

RT	CO-ELUTION COMPOUNDS
20.427	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
20.427	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

checked ok

11/20/12

Analytical Resources, Inc.

Semivolatile Report SW846 Method 8270D

Data file : /chem3/nt11.i/20121120.b/11201205.d
Lab Smp Id: VR80LCSDW1 Client Smp ID: VR80LCSDW1
Inj Date : 20-NOV-2012 14:10
Operator : JZ Inst ID: nt11.i
Smp Info : VR80LCSDW1,
Misc Info : 12-22456
Comment : 1ul Injection
Method : /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Meth Date : 20-Nov-2012 16:07 jianqing Quant Type: ISTD
Cal Date : 15-NOV-2012 20:24 Cal File: 11151205.d
Als bottle: 5 QC Sample: LCSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: pnax.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/Vo * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	500.00000	Volume of final extract (uL)
Vo	500.00000	Volume of sample extracted (mL)

Cpnd Variable Local Compound Variable

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
*	6	Naphthalene-d8	136	5.432	5.441	(1.000)	677815	2.00000	
	7	Naphthalene	128	5.460	5.470	(1.005)	667575	1.84288	1.843
$	12	2-Methylnaphthalene-d10	152	6.167	6.177	(1.135)	402366	1.73740	1.737
	14	2-Methylnaphthalene	141	6.215	6.224	(1.144)	368707	1.80649	1.806
	15	1-methylnaphthalene	141	6.407	6.416	(1.180)	388471	1.98715	1.987
	21	Acenaphthylene	152	7.597	7.603	(0.986)	601317	1.80813	1.808
*	22	Acenaphthene-d10	164	7.707	7.717	(1.000)	382722	2.00000	
	23	Acenaphthene	153	7.758	7.764	(1.007)	422401	1.99724	1.997
	11	Dibenzofuran	168	7.909	7.915	(1.026)	580761	1.87444	1.874
	25	Fluorene	166	8.386	8.392	(1.088)	519686	2.18245	2.182
*	28	Phenanthrene-d10	188	9.730	9.736	(1.000)	548086	2.00000	
	30	Phenanthrene	178	9.768	9.771	(1.004)	765091	2.31094	2.311
	31	Anthracene	178	9.806	9.812	(1.008)	651205	2.04894	2.049
	36	Fluoranthene	202	11.421	11.424	(1.174)	856896	2.58333	2.583
	39	Pyrene	202	11.885	11.891	(0.829)	858147	2.57557	2.576
	46	Benzo(a)anthracene	228	14.220	14.220	(0.992)	740743	2.43818	2.438

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/L)
*	47 Chrysene-d12	240	14.340	14.343	(1.000)	604613	2.00000	
	48 Chrysene	228	14.410	14.409	(1.005)	770662	2.61349	2.613
	51 Benzo(b)fluoranthene	252	16.855	16.855	(0.931)	805654	3.10342	3.103
	52 Benzo(k)fluoranthene	252	16.915	16.912	(0.934)	811025	2.87664	2.877
	251 Benzo(j)fluoranthene	252	16.991	16.988	(0.939)	693103	2.33005	2.330
	54 Benzo(a)pyrene	252	17.868	17.871	(0.987)	539844	2.04728	2.047
*	56 Perylene-d12	264	18.102	18.098	(1.000)	560931	2.00000	
	63 Indeno(1,2,3-cd)pyrene	276	20.424	20.415	(1.128)	841657	2.63281	2.633
$	60 Dibenzo(a,h)anthracene-d14	292	20.336	20.323	(1.123)	428840	2.30609	2.306
	62 Dibenzo(a,h)anthracene	278	20.424	20.418	(1.128)	590962	2.26982	2.270
	61 Benzo(g,h,i)perylene	276	21.295	21.289	(1.176)	734128	2.69936	2.699
	57 Perylene	252	18.171	18.171	(1.004)	658730	2.40891	2.409

Analytical Resources, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt11.i
Lab File ID: 11201205.d
Lab Smp Id: VR80LCSDW1
Analysis Type: SV
Quant Type: ISTD
Operator: JZ
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22456

Calibration Date: 20-NOV-2012
Calibration Time: 12:31
Client Smp ID: VR80LCSDW1
Level: LOW
Sample Type: Liquid

Test Mode:
Use Initial Calibration Level 4.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	516111	258056	1032222	677815	31.33
22 Acenaphthene-d10	284255	142128	568510	382722	34.64
28 Phenanthrene-d10	410660	205330	821320	548086	33.46
47 Chrysene-d12	467886	233943	935772	604613	29.22
56 Perylene-d12	472330	236165	944660	560931	18.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
6 Naphthalene-d8	5.44	4.94	5.94	5.43	-0.17
22 Acenaphthene-d10	7.72	7.22	8.22	7.71	-0.12
28 Phenanthrene-d10	9.74	9.24	10.24	9.73	-0.06
47 Chrysene-d12	14.34	13.84	14.84	14.34	-0.02
56 Perylene-d12	18.10	17.60	18.60	18.10	0.02

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

Analytical Resources, Inc.

RECOVERY REPORT

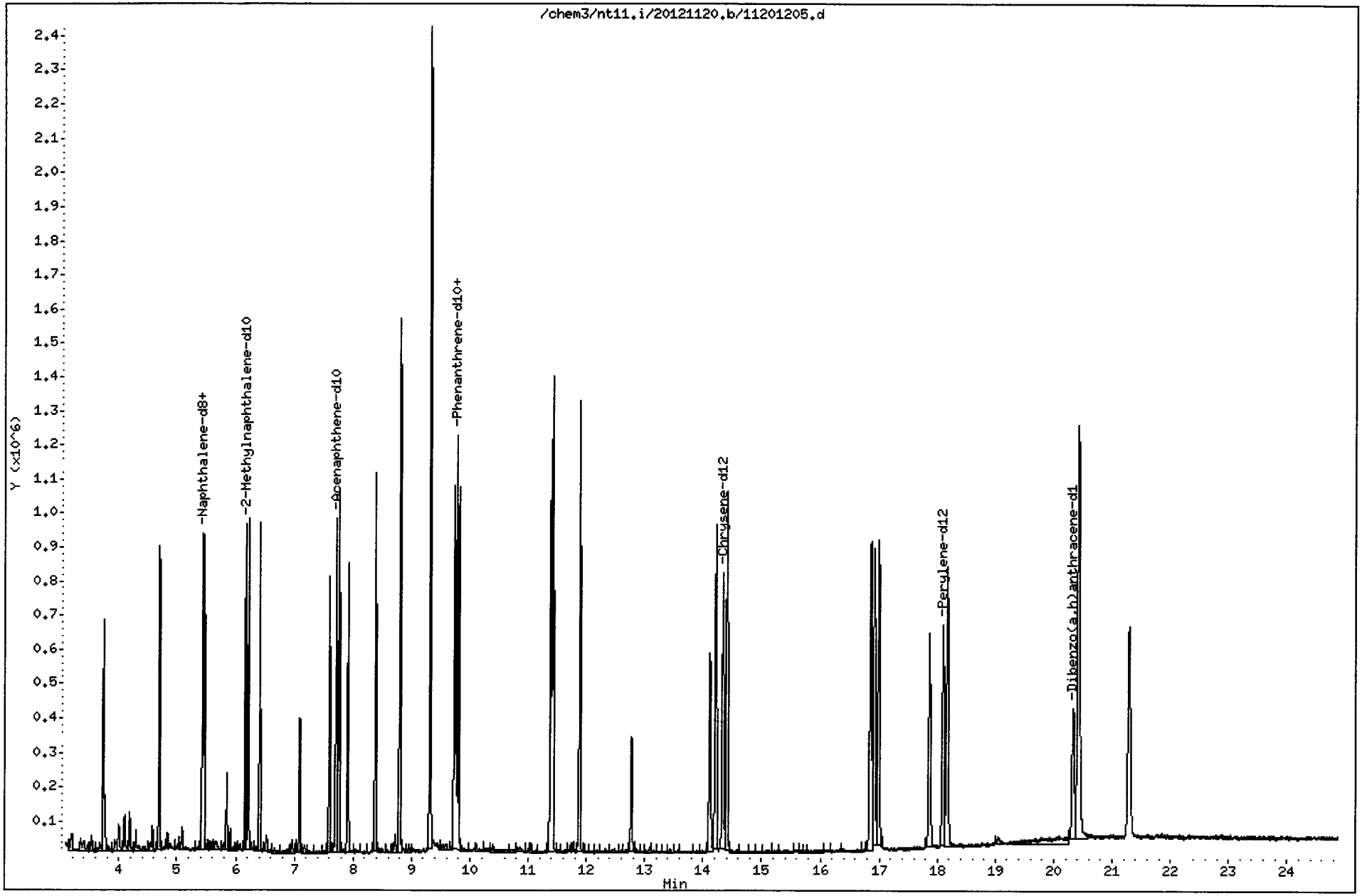
Client Name: Anchor QEA, LLC
Client SDG: VR80
Sample Matrix: LIQUID
Fraction: SV
Lab Smp Id: VR80LCSDW1
Client Smp ID: VR80LCSDW1
Level: LOW
Operator: JZ
Data Type: MS DATA
SampleType: LCSD
SpikeList File: pnalcsw.spk
Quant Type: ISTD
Sublist File: pnax.sub
Method File: /chem3/nt11.i/20121120.b/FSIMPNA111512.m
Misc Info: 12-22456

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
7 Naphthalene	3.000	1.843	61.43	37-100
14 2-Methylnaphthalen	3.000	1.806	60.22	34-107
15 1-methylnaphthalen	3.000	1.987	66.24	30-160
21 Acenaphthylene	3.000	1.808	60.27	32-104
23 Acenaphthene	3.000	1.997	66.57	40-102
11 Dibenzofuran	3.000	1.874	62.48	44-104
25 Fluorene	3.000	2.182	72.75	43-114
30 Phenanthrene	3.000	2.311	77.03	43-116
31 Anthracene	3.000	2.049	68.30	30-121
36 Fluoranthene	3.000	2.583	86.11	46-138
39 Pyrene	3.000	2.576	85.85	47-124
46 Benzo(a)anthracene	3.000	2.438	81.27	38-134
48 Chrysene	3.000	2.613	87.12	52-112
51 Benzo(b)fluoranthe	3.000	3.103	103.45	49-123
52 Benzo(k)fluoranthe	3.000	2.877	95.89	50-127
54 Benzo(a)pyrene	3.000	2.047	68.24	24-118
63 Indeno(1,2,3-cd)py	3.000	2.633	87.76	32-123
62 Dibenzo(a,h)anthra	3.000	2.270	75.66	30-127
61 Benzo(g,h,i)peryle	3.000	2.699	89.98	26-124
57 Perylene	3.000	2.409	80.30	30-160

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 12 2-Methylnaphthalen	3.000	1.737	57.91	33-107
$ 60 Dibenzo(a,h)anthra	3.000	2.306	76.87	10-142

Data File: /chem3/nt11.i/20121120.b/11201205.d
Date : 20-NOV-2012 14:10
Client ID: VR80LCSDW1
Sample Info: VR80LCSDW1,
Volume Injected (uL): 1.0
Column phase: ZB-5msi

Instrument: nt11.i
Operator: JZ
Column diameter: 0.25



CO-ELUTION SUMMARY FOR FILE - 11201205.d

Lab ID: VR80LCSDW1, Method: FSIMPNA111512.m, Instrument: nt11.i, Date: 20-NOV

RT	CO-ELUTION COMPOUNDS
20.424	Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene
20.424	Dibenzo(a,h)anthracene and Indeno(1,2,3-cd)pyrene

checked ok

11/20/12

Pesticide Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: VR80

Incorporated
Analytical Chemists and Consultants

Pest – Water
Separatory Funnel (3510C) (SOP # 3311S)
In-House (0.05-0.1ppb)

Preparation Test Pest # 1(PESWSI)
ARI Job No(s) VR80

Batch set up by: SP

Bottle #	ARI Sample I.D.	Volume Extracted	(Opt) Sulfur Clean 4.5mL+0.5mL (5mL) Ethyl Acetate 1 2 3	(Opt) Silica Gel Clean (1:5)	Final Effective Volume	Volume to Lab	Comment	Verify Client ID
	VR80 MBW	500mL	(5mL) Y/N AC 11-20-12	(1:5) Y/N	5mL	1mL		AR 11/13/12 CT Analyst/Date
	SBW	500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		Verify pH is 5-9
	SBW Dup.	500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		AR 11/13/12 CT Analyst/Date
	~~QLS~~	~~500mL~~	~~(5mL) Y/N~~	~~(1:5) Y/N~~	~~5mL~~	~~1mL~~		
6	VR80 A	500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		KD 80-85°C
6	B	500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		Hexane Exchange (2 X 20mL) 100°C
6	C	500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		YC 11/14/12 Analyst/Date
5	D	500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		
		500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		TurboVap (1) 2 3 Pre-Cleanups (4mL=10mL Hexane Exchange)
		500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		AC 11-19-12 Analyst/Date
		500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		
		500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		
		500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		
		500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		TurboVap 1 2 3 Post Cleanups
		500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		
		500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL	AC 11-19-12	
		500mL	(5mL) Y/N	(1:5) Y/N	5mL	1mL		
Analyst/Date		AR 11/13/12 →	AC 11-19-12	~~AC~~ AC 11-19-12	AC 11-19-12	AC 11-19-12		Analyst/Date

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate	N (2035-2)	2µg/mL	100µL	5/16/13	AR	WW
Spike	3 (1983-1)	0.5/1/5µg/mL	200µL	12/13/12	AR	WW
~~QLS Spike~~	~~10 ( )~~	~~0.25-2.5µg/mL~~	~~50µL~~			
Extraction Time: 16.25						

SPECIAL INSTRUCTIONS: 1. Verify pH is 5-9 2. Adjust pH (if necessary=Analyst Notes). 3. Add Surr/Spike.
4. Extract 3X with 30mL DCM. 5. KD (NO Drying Column) at 80°. 6. Exchange (2 X with 20mL) Hexane at 100°.
7. TurboVap to 4mL=10mL Hexane Exchange. 8. TurboVap. 9. Clean-ups? 10. TurboVap (if Silica Clean).
11. Vial with Hexane.

A. Archive Y (N)

3038F

22456

Revision 9
07/19/12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory
Analyst Notes

ARI Job No.: VR 80 Client ID: Anchor QEA, LLC

Parameter: Pest Client Project: City of Kenmore

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☑ Turbid/Color=VR 80 Samples A-D, light tan, clear	CT ABC 11/13/12
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☑ Emulsions (%)=VR 80 Samples A-D 100% emulsion, used Centrifuge breaking, dry with sulfate	CT ABC 11/13/12
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
(Centrifuge#1 used for all Centrifugations)	

Pesticide Raw Data
Initial Calibration

ARI Job ID: VR80

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Initial Calibration Notes

ARI SOP: **403S**(PCB) **405S**(Herb) **407S**(TPH-D) **409S**(HCID) **412S**(PCP) **423S**(Pest)
427S(Dir Inj) **428S**(EPH) **Other**

Instrument: FID-3A FID-3B FID-4A ~~FID-4B~~ FID-5 FID-7 FID-8
FID-9 ECD-1 ECD-5 ECD-6 ECD-7 ECD-8

Curve Date(s): 10/3/2012 Internal Standard ID 2004-1 Expiration 7/26/2013

Endrin/DDT Breakdown <15%?	YES / NO / NA	ICV Exceeding ±20%?	YES / NO
ICal Meets %RSD & r^2 Criteria	YES / NO	ICV Exceeding ±30%?	YES / NO
Manual Integrations for ICal?	YES / NO	Linear Fits Used?	YES / NO
Minimum Response S/N Met	YES / NO	Quadratic Fits Used?	YES / NO
		Calibration Points Dropped?	YES / NO

Primary Source	Standard #	Expiration	Secondary Source	Standard #	Expiration
DS	1991-1	1/14/2013	INDA ICV	1987-3	10/4/2012
IB	1982-2	5/16/2013	WND ICV	1988-1	11/30/2012
INDA	1982-1	12/13/2012	HCB/HCBD ICV	1870-2E	6/20/2012
WND	1982-3	1/21/2013			
Toxaphene	1984-3	12/4/2012			
Technical nonachlor	1985-1	5/16/2013			

Detail problems, corrective actions and/or other pertinent information below:

Toxaphene, T-chlordane single points were added on 10/12/12.

Kepone single point was added on 10/13/12.

Analyst: _____ **Date:** 10/4/2012

Reviewer: _____ **Date:** 10/4/12

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd6.i/20121003PEST.b/ical-2.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	03-OCT-2012 15:10	1003A009.d	1	DS	
2	03-OCT-2012 15:27	1003A010.d	1	IB	
3	03-OCT-2012 15:45	1003A011.d	1	INDAE	
4	03-OCT-2012 16:03	1003A012.d	1	WNDE	
5	03-OCT-2012 16:21	1003A013.d	1	TOXAPH	
6	03-OCT-2012 16:39	1003A014.d	1	INDAE	
7	03-OCT-2012 16:56	1003A015.d	1	INDAA	
8	03-OCT-2012 17:14	1003A016.d	1	INDAB	
9	03-OCT-2012 17:32	1003A017.d	1	INDAC	
10	03-OCT-2012 17:50	1003A018.d	1	INDAD	
11	03-OCT-2012 18:08	1003A019.d	1	INDAF	
12	03-OCT-2012 18:26	1003A020.d	1	INDAG	
13	03-OCT-2012 18:43	1003A021.d	1	INDA ICV	
14	03-OCT-2012 19:01	1003A022.d	1	HCB/HCBD ICV	
15	03-OCT-2012 19:19	1003A023.d	1	WNDE	
16	03-OCT-2012 19:37	1003A024.d	1	WNDA	
17	03-OCT-2012 19:55	1003A025.d	1	WNDB	
18	03-OCT-2012 20:12	1003A026.d	1	WNDC	
19	03-OCT-2012 20:30	1003A027.d	1	WNDD	
20	03-OCT-2012 20:48	1003A028.d	1	WNDF	
21	03-OCT-2012 21:06	1003A029.d	1	WNDG	
22	03-OCT-2012 21:24	1003A030.d	1	WND ICV ← air inject	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-OCT-2012 16:21
End Cal Date : 03-OCT-2012 21:06
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Cal Date : 04-Oct-2012 10:27 aron
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A024.d
Level 2: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A025.d
Level 3: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A026.d
Level 4: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A027.d
Level 5: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A023.d
Level 6: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A028.d
Level 7: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A029.d

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
1 Hexachlorobutadiene	1.96452	1.88941	1.85758	1.72561	1.65924	1.55490		
	1.50700						1.73689	10.021
3 Hexachlorobenzene	1.77740	1.66369	1.61105	1.49324	1.40813	1.31793		
	1.24119						1.50180	12.885
4 alpha-BHC	1.70683	1.73283	1.80435	1.77722	1.76123	1.72410		
	1.70994						1.74521	2.105
5 gamma-BHC (Lindane)	1.60945	1.60439	1.63753	1.59885	1.57117	1.53148		
	1.49096						1.57769	3.216
6 beta-BHC	0.78856	0.75069	0.74994	0.70069	0.67462	0.65247		
	0.62743						0.70634	8.334
7 delta-BHC	1.33552	1.36638	1.41057	1.38376	1.41291	1.39443		
	1.38744						1.38443	1.938

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-OCT-2012 16:21
End Cal Date : 03-OCT-2012 21:06
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Cal Date : 04-Oct-2012 10:27 aron
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
8 Heptachlor	1.58565	1.54846	1.55095	1.48197	1.41549	1.31649		
	1.21233						1.44448	9.568
37 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
9 Aldrin	1.51600	1.49789	1.51234	1.46276	1.40832	1.32410		
	1.22122						1.42038	7.844
10 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
11 Heptachlor epoxide b	1.44761	1.40029	1.37924	1.30458	1.23837	1.14382		
	1.04907						1.28042	11.345
12 gamma-Chlordane	1.49549	1.43152	1.40996	1.33982	1.29674	1.22454		
	1.15225						1.33576	9.055
13 alpha-Chlordane	1.37398	1.33392	1.32102	1.25634	1.20478	1.14711		
	1.08079						1.24542	8.587
14 Endosulfan I	1.26978	1.24395	1.23358	1.17303	1.11763	1.04639		
	0.96428						1.14981	9.850
15 4,4'-DDE	1.29981	1.27916	1.27711	1.20080	1.11468	1.01602		
	0.93083						1.15977	12.417

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-OCT-2012 16:21
End Cal Date : 03-OCT-2012 21:06
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Cal Date : 04-Oct-2012 10:27 aron
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
16 Dieldrin	1.35910	1.33841	1.33147	1.25422	1.16627	1.07097		
	0.99399						1.21635	11.774
17 Endrin	1.59095	1.53734	1.49373	1.40919	1.32841	1.18568		
	1.11612						1.38020	12.998
18 4,4'-DDD	1.43433	1.40840	1.39214	1.33378	1.27120	1.16860		
	1.11604						1.30350	9.462
19 Endosulfan II	1.58713	1.52275	1.48555	1.39752	1.31774	1.20302		
	1.14354						1.37961	12.051
20 4,4'-DDT	1.34644	1.31004	1.30034	1.25878	1.21281	1.14333		
	1.11143						1.24045	7.123
21 Endrin aldehyde	1.25867	1.19525	1.15283	1.09374	1.03694	0.95492		
	0.91023						1.08608	11.693
22 Endosulfan sulfate	1.27852	1.24336	1.21726	1.17793	1.13201	1.05347		
	1.01791						1.16006	8.396
23 Methoxychlor	0.65922	0.60416	0.55266	0.49723	0.44948	0.41261		
	+++++						0.52923	17.734
24 Endrin ketone	1.34557	1.26901	1.21268	1.15254	1.09245	1.02737		
	1.01204						1.15881	10.754

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-OCT-2012 16:21
End Cal Date : 03-OCT-2012 21:06
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Cal Date : 04-Oct-2012 10:27 aron
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
34 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
35 Toxaphene(1)	+++++	+++++	+++++	+++++	0.04805	+++++		
	+++++						0.04805	0.000

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-OCT-2012 16:21
End Cal Date : 03-OCT-2012 21:06
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Cal Date : 04-Oct-2012 10:27 aron
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD	
	80.000 Level 7								
(2)	+++++	+++++	+++++	+++++	0.07107	+++++			
	+++++						0.07107	0.000	
(3)	+++++	+++++	+++++	+++++	0.07967	+++++			
	+++++						0.07967	0.000	
(4)	+++++	+++++	+++++	+++++	0.05935	+++++			
	+++++						0.05935	0.000	
(5)	+++++	+++++	+++++	+++++	0.02785	+++++			
	+++++						0.02785	0.000	
38 2,4-DDE	0.97949	0.83494	0.79987	0.73476	0.67624	0.60532			
	0.53372						0.73776	20.309	<-
39 2,4-DDD	1.13549	0.97967	0.94479	0.89950	0.84410	0.77710			
	0.69140						0.89601	16.137	
40 2,4-DDT	1.21207	1.05333	1.03069	0.98415	0.92238	0.86762			
	0.77228						0.97750	14.520	
41 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++						+++++	+++++	
42 Oxychlordane	1.22760	1.09508	1.08515	1.02028	0.96995	0.90368			
	0.83939						1.02016	12.758	

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-OCT-2012 16:21
End Cal Date : 03-OCT-2012 21:06
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Cal Date : 04-Oct-2012 10:27 aron
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
43 trans-Nonachlor	2.00494	1.77062	1.75652	1.68455	1.58512	1.48614		
	1.35598						1.66341	12.737
44 cis-Nonachlor	2.09733	1.84381	1.81720	1.74905	1.64786	1.56613		
	1.45320						1.73922	12.094
45 Mirex	1.27446	1.05839	1.00141	0.92483	0.86110	0.82792		
	0.78316						0.96161	17.505
46 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
56 Tech-Chlordane(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
47 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
48 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-OCT-2012 16:21
End Cal Date : 03-OCT-2012 21:06
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Cal Date : 04-Oct-2012 10:27 aron
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
49 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
50 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++		
'	+++++						+++++	+++++
51 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
53 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
54 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 2 Tetrachloro-m-xylene	1.65121	1.58336	1.53549	1.40581	1.29451	1.16920		
	1.09384						1.39049	15.330
$ 25 Decachlorobiphenyl	1.54270	1.40157	1.29288	1.19023	1.11868	1.04550		
	1.01956						1.23016	15.688

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecd6.i/20121003PEST.b/ical-2.b

ARI Job No.: DS Method: PEST1003B.m Instrument: ecd6.i Date: 03-OCT-2012

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1510	1003A009.d	DS		1	NO MANUAL INTEGRATION
1527	1003A010.d	IB		1	NO MANUAL INTEGRATION
1545	1003A011.d	INDAE		1	NO MANUAL INTEGRATION
1603	1003A012.d	WNDE		1	NO MANUAL INTEGRATION
1621	1003A013.d	TOXAPH		1	Toxaphene,
1639	1003A014.d	INDAE		1	NO MANUAL INTEGRATION
1656	1003A015.d	INDAA		1	NO MANUAL INTEGRATION
1714	1003A016.d	INDAB		1	NO MANUAL INTEGRATION
1732	1003A017.d	INDAC		1	NO MANUAL INTEGRATION
1750	1003A018.d	INDAD		1	NO MANUAL INTEGRATION
1808	1003A019.d	INDAF		1	NO MANUAL INTEGRATION
1826	1003A020.d	INDAG		1	NO MANUAL INTEGRATION
1843	1003A021.d	INDA ICV		1	NO MANUAL INTEGRATION
1901	1003A022.d	HCB/HCBD ICV		1	NO MANUAL INTEGRATION
1919	1003A023.d	WNDE		1	NO MANUAL INTEGRATION
1937	1003A024.d	WNDA		1	NO MANUAL INTEGRATION
1955	1003A025.d	WNDB		1	NO MANUAL INTEGRATION
2012	1003A026.d	WNDC		1	NO MANUAL INTEGRATION
2030	1003A027.d	WNDD		1	NO MANUAL INTEGRATION
2048	1003A028.d	WNDF		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecd6.i/20121003PEST.b/ical-2.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2124	1003A030.d	WND ICV		1	NO MANUAL INTEGRATION
0836	1003A031.d	TECHLOR 200		1	NO MANUAL INTEGRATION

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Batch File: /chem2/ecd6.i/20121003PEST.b/ical-2.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	1003A014	1003A015	1003A016	1003A017	1003A018	1003A019	1003A020
INJ.DATE:	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012
INJ.TIME:	16:39	16:56	17:14	17:32	17:50	18:08	18:26

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	2.376	2.376	2.376	2.376	2.376	2.377	2.377	2.376	2.326-2.426	2.376	0.001
* 52 1Bromo-2nitrobenzene	3.195	3.195	3.195	3.195	3.195	3.195	3.195	3.195	3.145-3.245	3.195	0.000
* 55 Hexabromobiphenyl	10.105	10.106	10.106	10.106	10.107	10.106	10.107	10.105	10.055-10.155	10.106	0.001
$ 2 Tetrachloro-m-xylene	4.007	4.006	4.007	4.006	4.007	4.007	4.008	4.007	3.957-4.057	4.007	0.000
3 Hexachlorobenzene	4.458	4.457	4.458	4.457	4.458	4.457	4.458	4.458	4.408-4.508	4.458	0.000
4 alpha-BHC	4.584	4.584	4.584	4.584	4.585	4.584	4.585	4.584	4.534-4.634	4.584	0.001
5 gamma-BHC (Lindane)	4.936	4.936	4.936	4.936	4.936	4.936	4.937	4.936	4.886-4.986	4.936	0.000
6 beta-BHC	5.007	5.006	5.006	5.006	5.007	5.006	5.007	5.007	4.957-5.057	5.006	0.000
7 delta-BHC	5.314	5.314	5.313	5.313	5.314	5.314	5.314	5.314	5.264-5.364	5.314	0.000
8 Heptachlor	5.397	5.396	5.396	5.396	5.397	5.396	5.397	5.397	5.347-5.447	5.396	0.001
37 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.538-14.638	+++++	+++++
9 Aldrin	5.735	5.734	5.734	5.734	5.735	5.735	5.736	5.735	5.685-5.785	5.735	0.001
10 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.630-12.730	+++++	+++++
11 Heptachlor epoxide b	6.293	6.292	6.292	6.292	6.293	6.292	6.293	6.293	6.243-6.343	6.293	0.001
12 gamma-Chlordane	6.475	6.475	6.475	6.474	6.475	6.475	6.476	6.475	6.425-6.525	6.475	0.001
13 alpha-Chlordane	6.614	6.613	6.613	6.613	6.614	6.613	6.615	6.614	6.564-6.664	6.614	0.001
14 Endosulfan I	6.680	6.679	6.679	6.679	6.679	6.679	6.680	6.680	6.630-6.730	6.679	0.000

Reviewer 1 AR Date: 10/4/2012
Reviewer 2 Date: 10/4/12

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Batch File: /chem2/ecd6.i/20121003PEST.b/ical-2.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
15 4,4'-DDE	6.744	6.744	6.744	6.744	6.744	6.744	6.745	6.744	6.694-6.794	6.744	0.001
16 Dieldrin	6.938	6.938	6.937	6.937	6.938	6.937	6.939	6.938	6.888-6.988	6.938	0.001
17 Endrin	7.228	7.227	7.227	7.227	7.228	7.227	7.228	7.228	7.178-7.278	7.227	0.000
18 4,4'-DDD	7.282	7.282	7.281	7.281	7.282	7.282	7.283	7.282	7.232-7.332	7.282	0.001
19 Endosulfan II	7.416	7.416	7.415	7.415	7.416	7.416	7.416	7.416	7.366-7.466	7.416	0.000
20 4,4'-DDT	7.571	7.571	7.570	7.570	7.571	7.570	7.571	7.571	7.521-7.621	7.570	0.000
21 Endrin aldehyde	7.715	7.715	7.714	7.714	7.715	7.714	7.715	7.715	7.665-7.765	7.715	0.000
22 Endosulfan sulfate	7.960	7.959	7.959	7.959	7.959	7.959	7.960	7.960	7.910-8.010	7.959	0.000
23 Methoxychlor	8.156	8.156	8.155	8.155	8.156	8.156	8.158	8.156	8.106-8.206	8.156	0.001
24 Endrin ketone	8.448	8.447	8.447	8.447	8.448	8.447	8.449	8.448	8.398-8.498	8.448	0.001
$ 25 Decachlorobiphenyl	9.565	9.565	9.565	9.566	9.566	9.565	9.566	9.565	9.515-9.615	9.566	0.001
26 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.130-4.230	+++++	+++++
27 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.001-5.101	+++++	+++++
28 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.121-5.221	+++++	+++++
29 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.920-5.020	+++++	+++++
30 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.235-5.335	+++++	+++++
31 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.918-6.018	+++++	+++++
32 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.717-6.817	+++++	+++++
33 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.664-9.764	+++++	+++++
34 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.741-11.841	+++++	+++++
35 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.164	7.114-7.214	+++++	+++++
38 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.454	6.404-6.504	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Batch File: /chem2/ecd6.i/20121003PEST.b/ical-2.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
39 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.939	6.889-6.989	+++++	+++++
40 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.227	7.177-7.277	+++++	+++++
41 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.728	1.678-1.778	+++++	+++++
42 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.203	6.153-6.253	+++++	+++++
43 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.560	6.510-6.610	+++++	+++++
44 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.286	7.236-7.336	+++++	+++++
45 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.434	8.384-8.484	+++++	+++++
46 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.449-21.549	+++++	+++++
56 Tech-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.919	5.869-5.969	+++++	+++++
47 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.821-4.921	+++++	+++++
48 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.590-6.690	+++++	+++++
49 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.065-8.165	+++++	+++++
50 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.236-11.336	+++++	+++++
51 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.477-6.577	+++++	+++++
53 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.292-6.392	+++++	+++++
54 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.791-6.891	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Batch File: /chem2/ecd6.i/20121003PEST.b/ical-2.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	1003A023	1003A024	1003A025	1003A026	1003A027	1003A028	1003A029
INJ.DATE:	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012
INJ.TIME:	19:19	19:37	19:55	20:12	20:30	20:48	21:06

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.377	2.327-2.427	+++++	+++++
*	52 1Bromo-2nitrobenzene	3.195	3.195	3.195	3.195	3.195	3.195	3.195	3.195	3.145-3.245	3.195	0.000
*	55 Hexabromobiphenyl	10.105	10.106	10.106	10.106	10.106	10.106	10.106	10.105	10.055-10.155	10.106	0.000
$	2 Tetrachloro-m-xylene	4.007	4.007	4.007	4.007	4.007	4.007	4.008	4.008	3.958-4.058	4.007	0.000
	3 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.458	4.408-4.508	+++++	+++++
	4 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.585	4.535-4.635	+++++	+++++
	5 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.937	4.887-4.987	+++++	+++++
	6 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.007	4.957-5.057	+++++	+++++
	7 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.314	5.264-5.364	+++++	+++++
	8 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.397	5.347-5.447	+++++	+++++
	37 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.538-14.638	+++++	+++++
	9 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.736	5.686-5.786	+++++	+++++
	10 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.630-12.730	+++++	+++++
	11 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.293	6.243-6.343	+++++	+++++
	12 gamma-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.476	6.426-6.526	+++++	+++++
	13 alpha-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.615	6.565-6.665	+++++	+++++
	14 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.680	6.630-6.730	+++++	+++++

Reviewer 1 AR Date: 10/4/2012

Reviewer 2 Date: 10/4/12

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Batch File: /chem2/ecd6.i/20121003PEST.b/ical-2.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
15 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.745	6.695-6.795	+++++	+++++
16 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.939	6.889-6.989	+++++	+++++
17 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.228	7.178-7.278	+++++	+++++
18 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.283	7.233-7.333	+++++	+++++
19 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.416	7.366-7.466	+++++	+++++
20 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.571	7.521-7.621	+++++	+++++
21 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.715	7.665-7.765	+++++	+++++
22 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.960	7.910-8.010	+++++	+++++
23 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.158	8.108-8.208	+++++	+++++
24 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.449	8.399-8.499	+++++	+++++
$ 25 Decachlorobiphenyl	9.565	9.565	9.565	9.565	9.566	9.566	9.565	9.566	9.516-9.616	9.565	0.000
26 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.130-4.230	+++++	+++++
27 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.001-5.101	+++++	+++++
28 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.121-5.221	+++++	+++++
29 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.920-5.020	+++++	+++++
30 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.235-5.335	+++++	+++++
31 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.918-6.018	+++++	+++++
32 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.717-6.817	+++++	+++++
33 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.664-9.764	+++++	+++++
34 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.741-11.841	+++++	+++++
35 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.164	7.114-7.214	+++++	+++++
38 2,4-DDE	6.454	6.453	6.453	6.453	6.453	6.454	6.453	6.454	6.404-6.504	6.453	0.000

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121003PEST.b/PEST1003B.m
Batch File: /chem2/ecd6.i/20121003PEST.b/ical-2.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
39 2,4-DDD	6.939	6.939	6.939	6.939	6.939	6.939	6.939	6.939	6.889-6.989	6.939	0.000
40 2,4-DDT	7.227	7.227	7.227	7.227	7.227	7.227	7.227	7.227	7.177-7.277	7.227	0.000
41 Hexachloroethane	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.728	1.678-1.778	0.000	0.000
42 Oxychlordane	6.203	6.202	6.203	6.202	6.203	6.203	6.203	6.203	6.153-6.253	6.203	0.000
43 trans-Nonachlor	6.560	6.560	6.560	6.560	6.560	6.561	6.561	6.560	6.510-6.610	6.560	0.000
44 cis-Nonachlor	7.286	7.286	7.286	7.285	7.286	7.286	7.286	7.286	7.236-7.336	7.286	0.000
45 Mirex	8.433	8.433	8.433	8.433	8.434	8.434	8.434	8.433	8.383-8.483	8.434	0.000
46 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.449-21.549	+++++	+++++
56 Tech-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.919	5.869-5.969	+++++	+++++
47 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.821-4.921	+++++	+++++
48 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.590-6.690	+++++	+++++
49 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.065-8.165	+++++	+++++
50 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.236-11.336	+++++	+++++
51 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.477-6.577	+++++	+++++
53 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.292-6.392	+++++	+++++
54 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.791-6.891	+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-OCT-2012 16:21
End Cal Date : 03-OCT-2012 21:06
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Cal Date : 04-Oct-2012 10:53 aron
Curve Type : Average

Calibration File Names:
Level 1: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A024.d
Level 2: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A025.d
Level 3: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A026.d
Level 4: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A027.d
Level 5: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A023.d
Level 6: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A028.d
Level 7: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A029.d

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
1 Hexachlorobutadiene	2.08122	1.94023	1.88041	1.76338	1.70361	1.64246	1.63666	1.80685	9.234
3 Hexachlorobenzene	1.59035	1.45330	1.36965	1.26348	1.19689	1.13240	1.12008	1.30374	13.468
4 alpha-BHC	1.48360	1.46155	1.49380	1.48821	1.49848	1.49064	1.51994	1.49089	1.172
5 gamma-BHC (Lindane)	1.42027	1.37361	1.37657	1.35654	1.35517	1.34310	1.36284	1.36973	1.827
6 beta-BHC	0.75152	0.69280	0.65689	0.60737	0.58368	0.56247	0.55679	0.63022	11.590
7 delta-BHC	1.20266	1.17048	1.17866	1.18779	1.20882	1.21617	1.24776	1.20176	2.170

Analytical Resources, Inc.

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Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Cal Date : 04-Oct-2012 10:53 aron
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
8 Heptachlor	1.37096	1.29380	1.26529	1.22345	1.20404	1.17174		
	1.16397						1.24189	5.941
9 Aldrin	1.38830	1.30944	1.28954	1.25093	1.23693	1.20472		
	1.19792						1.26825	5.272
38 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
10 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
11 Heptachlor epoxide b	1.41113	1.31130	1.26157	1.19952	1.17085	1.11494		
	1.08846						1.22254	9.310
12 gamma-Chlordane	1.37924	1.28112	1.23666	1.18606	1.16066	1.13221		
	1.13348						1.21563	7.442
13 alpha-Chlordane	1.34294	1.24571	1.19997	1.14614	1.11500	1.08492		
	1.07773						1.17320	8.221
14 Endosulfan I	1.30064	1.21267	1.16698	1.11141	1.07734	1.03495		
	1.01555						1.13136	9.025
15 4,4'-DDE	1.15090	1.10895	1.10913	1.08332	1.06301	1.02741		
	1.01565						1.07977	4.461

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-OCT-2012 16:21
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Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Cal Date : 04-Oct-2012 10:53 aron
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
16 Dieldrin	1.26962	1.22036	1.21488	1.17193	1.14024	1.09397		
	1.07520						1.16946	6.059
17 Endrin	1.18550	1.13729	1.12312	1.08787	1.07574	1.01997		
	1.02212						1.09309	5.553
18 4,4'-DDD	1.03194	0.99156	0.97503	0.94745	0.93552	0.89862		
	0.90115						0.95447	5.092
19 Endosulfan II	1.18813	1.12694	1.09574	1.04233	1.01705	0.96342		
	0.95522						1.05555	8.159
20 4,4'-DDT	1.01190	0.98009	0.97205	0.95041	0.94668	0.92402		
	0.93269						0.95969	3.169
21 Endrin aldehyde	0.98487	0.92248	0.88072	0.83463	0.80715	0.76588		
	0.76300						0.85125	9.722
22 Methoxychlor	0.55785	0.52375	0.49243	0.45541	0.43083	0.40961		
	0.41454						0.46920	12.174
23 Endosulfan sulfate	0.98577	0.93736	0.90840	0.87882	0.85578	0.82638		
	0.82672						0.88846	6.672
24 Endrin ketone	1.22441	1.11557	1.06066	1.00861	0.96767	0.94155		
	0.95438						1.03898	9.892

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-OCT-2012 16:21
End Cal Date : 03-OCT-2012 21:06
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Cal Date : 04-Oct-2012 10:53 aron
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
35 Toxaphene(1)	+++++	+++++	+++++	+++++	0.02494	+++++		
	+++++						0.02494	0.000
(2)	+++++	+++++	+++++	+++++	0.03398	+++++		
	+++++						0.03398	0.000
(3)	+++++	+++++	+++++	+++++	0.02866	+++++		
	+++++						0.02866	0.000
(4)	+++++	+++++	+++++	+++++	0.03669	+++++		
	+++++						0.03669	0.000
(5)	+++++	+++++	+++++	+++++	0.03125	+++++		
	+++++						0.03125	0.000
(6)	+++++	+++++	+++++	+++++	0.02327	+++++		
	+++++						0.02327	0.000
39 2,4-DDE	0.88094	0.75976	0.74096	0.72970	0.70472	0.67437		
	0.62740						0.73112	10.891
40 2,4-DDD	0.80172	0.69242	0.66336	0.63593	0.62037	0.60087		
	0.57003						0.65496	11.613
41 2,4-DDT	0.89394	0.77741	0.74942	0.72250	0.70393	0.69236		
	0.65022						0.74140	10.608

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-OCT-2012 16:21
End Cal Date : 03-OCT-2012 21:06
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Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Cal Date : 04-Oct-2012 10:53 aron
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
43 Oxychlordane	1.20752	1.03897	1.01070	0.96914	0.94973	0.91913		
	0.86792						0.99473	11.010
44 trans-Nonachlor	1.39750	1.22359	1.19551	1.15838	1.13889	1.11496		
	1.06434						1.18474	9.055
45 cis-Nonachlor	1.44929	1.27172	1.25939	1.22765	1.21920	1.20345		
	1.15379						1.25493	7.488
46 Mirex	1.09310	0.90433	0.85442	0.79518	0.76223	0.73762		
	0.70039						0.83532	15.933
47 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
59 Tech-Chlordane(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 03-OCT-2012 16:21
End Cal Date : 03-OCT-2012 21:06
Quant Method : ISTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Cal Date : 04-Oct-2012 10:53 aron
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
48 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
49 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
50 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
51 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
55 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
56 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
$ 2 Tetrachloro-m-xylene	1.34597	1.27986	1.24584	1.17341	1.12866	1.07044		
	1.05358						1.18539	9.261
$ 25 Decachlorobiphenyl	1.38903	1.22428	1.12392	1.02051	0.95315	0.89483		
	0.87835						1.06915	17.581

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecd6.i/20121003PEST.b/ical-1.b

ARI Job No.: DS Method: PEST1003.m Instrument: ecd6.i Date: 03-OCT-2012

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1510	1003A009.d	DS		1	NO MANUAL INTEGRATION
1527	1003A010.d	IB		1	NO MANUAL INTEGRATION
1545	1003A011.d	INDAE		1	NO MANUAL INTEGRATION
1603	1003A012.d	WNDE		1	NO MANUAL INTEGRATION
1621	1003A013.d	TOXAPH		1	Toxaphene,
1639	1003A014.d	INDAE		1	NO MANUAL INTEGRATION
1656	1003A015.d	INDAA		1	NO MANUAL INTEGRATION
1714	1003A016.d	INDAB		1	NO MANUAL INTEGRATION
1732	1003A017.d	INDAC		1	NO MANUAL INTEGRATION
1750	1003A018.d	INDAD		1	NO MANUAL INTEGRATION
1808	1003A019.d	INDAF		1	NO MANUAL INTEGRATION
1826	1003A020.d	INDAG		1	NO MANUAL INTEGRATION
1843	1003A021.d	INDA ICV		1	NO MANUAL INTEGRATION
1901	1003A022.d	HCB/HCBD ICV		1	NO MANUAL INTEGRATION
1919	1003A023.d	WNDE		1	NO MANUAL INTEGRATION
1937	1003A024.d	WNDA		1	NO MANUAL INTEGRATION
1955	1003A025.d	WNDB		1	NO MANUAL INTEGRATION
2012	1003A026.d	WNDC		1	NO MANUAL INTEGRATION
2030	1003A027.d	WNDD		1	NO MANUAL INTEGRATION
2048	1003A028.d	WNDF		1	NO MANUAL INTEGRATION

2106 1003A029.d WNDG 1 NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecd6.i/20121003PEST.b/ical-1.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2124	1003A030.d	WND ICV		1	NO MANUAL INTEGRATION
0836	1003A031.d	TECHLOR 200		1	NO MANUAL INTEGRATION

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Batch File: /chem2/ecd6.i/20121003PEST.b/ical-1.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	1003A014	1003A015	1003A016	1003A017	1003A018	1003A019	1003A020
INJ.DATE:	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012
INJ.TIME:	16:39	16:56	17:14	17:32	17:50	18:08	18:26

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	2.210	2.209	2.210	2.209	2.210	2.210	2.210	2.210	2.160-2.260	2.210	0.000
* 54 1Bromo-2nitrobenzene	3.015	3.015	3.015	3.015	3.015	3.015	3.015	3.015	2.965-3.065	3.015	0.000
* 58 Hexabromobiphenyl	8.750	8.750	8.750	8.750	8.750	8.750	8.750	8.750	8.700-8.800	8.750	0.000
$ 2 Tetrachloro-m-xylene	3.670	3.670	3.670	3.669	3.670	3.670	3.670	3.670	3.620-3.720	3.670	0.000
3 Hexachlorobenzene	4.002	4.002	4.001	4.001	4.001	4.001	4.002	4.002	3.952-4.052	4.002	0.000
4 alpha-BHC	4.147	4.146	4.147	4.146	4.147	4.147	4.147	4.147	4.097-4.197	4.147	0.000
5 gamma-BHC (Lindane)	4.424	4.424	4.424	4.424	4.424	4.424	4.424	4.424	4.374-4.474	4.424	0.000
6 beta-BHC	4.497	4.497	4.497	4.497	4.497	4.497	4.497	4.497	4.447-4.547	4.497	0.000
7 delta-BHC	4.663	4.663	4.662	4.662	4.663	4.662	4.663	4.663	4.613-4.713	4.663	0.000
8 Heptachlor	4.862	4.861	4.861	4.861	4.861	4.861	4.862	4.862	4.812-4.912	4.861	0.000
9 Aldrin	5.148	5.148	5.148	5.147	5.148	5.148	5.149	5.149	5.098-5.199	5.148	0.000
38 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.577-13.677	+++++	+++++
10 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.819-10.919	+++++	+++++
11 Heptachlor epoxide b	5.723	5.723	5.722	5.722	5.722	5.722	5.723	5.723	5.673-5.773	5.722	0.000
12 gamma-Chlordane	5.843	5.842	5.842	5.842	5.842	5.842	5.842	5.842	5.792-5.892	5.842	0.000
13 alpha-Chlordane	5.967	5.966	5.967	5.966	5.966	5.966	5.967	5.967	5.917-6.017	5.967	0.000
14 Endosulfan I	6.099	6.099	6.099	6.098	6.099	6.098	6.099	6.099	6.049-6.149	6.099	0.000

Reviewer 1 AR Date: 10/4/2012
Reviewer 2 _____ Date: _____

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Batch File: /chem2/ecd6.i/20121003PEST.b/ical-1.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	15 4,4'-DDE	6.027	6.026	6.026	6.026	6.027	6.026	6.027	6.027	5.977-6.077	6.027	0.000
	16 Dieldrin	6.322	6.322	6.322	6.322	6.322	6.322	6.322	6.322	6.272-6.372	6.322	0.000
	17 Endrin	6.540	6.541	6.540	6.539	6.540	6.539	6.540	6.540	6.490-6.590	6.540	0.000
	18 4,4'-DDD	6.584	6.583	6.583	6.583	6.583	6.583	6.584	6.584	6.534-6.634	6.583	0.000
	19 Endosulfan II	6.745	6.746	6.746	6.745	6.745	6.745	6.746	6.746	6.696-6.796	6.746	0.001
	20 4,4'-DDT	6.841	6.842	6.841	6.841	6.841	6.841	6.842	6.842	6.792-6.892	6.841	0.001
	21 Endrin aldehyde	7.123	7.124	7.123	7.123	7.124	7.123	7.123	7.123	7.073-7.173	7.123	0.000
	22 Methoxychlor	7.271	7.271	7.270	7.270	7.271	7.270	7.271	7.271	7.221-7.321	7.270	0.000
	23 Endosulfan sulfate	7.513	7.514	7.513	7.513	7.514	7.513	7.514	7.514	7.464-7.564	7.513	0.000
	24 Endrin ketone	7.766	7.767	7.767	7.766	7.767	7.766	7.766	7.766	7.716-7.816	7.766	0.000
$	25 Decachlorobiphenyl	8.610	8.610	8.610	8.610	8.611	8.610	8.610	8.610	8.560-8.660	8.610	0.000
	26 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.715-3.815	+++++	+++++
	27 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.831-4.931	+++++	+++++
	28 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.309-5.409	+++++	+++++
	29 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.715-3.815	+++++	+++++
	30 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.368-4.468	+++++	+++++
	31 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.207-5.307	+++++	+++++
	32 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	5.995-6.095	+++++	+++++
	33 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.251-8.351	+++++	+++++
	34 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.209-11.309	+++++	+++++
	35 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.496	6.446-6.546	+++++	+++++
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.703	5.653-5.753	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Batch File: /chem2/ecd6.i/20121003PEST.b/ical-1.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.190	6.140-6.240	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.429	6.379-6.479	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.738	1.688-1.788	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.627	5.577-5.677	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.951	5.901-6.001	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.566	6.516-6.616	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.437	7.387-7.487	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.106-20.206	+++++	+++++
59 Tech-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.518	4.468-4.568	+++++	+++++
48 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.269-6.369	+++++	+++++
49 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.886-9.986	+++++	+++++
50 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.841-11.941	+++++	+++++
51 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.777-14.877	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.700-9.800	+++++	+++++
55 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.057-9.157	+++++	+++++
56 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.201-10.301	+++++	+++++

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Batch File: /chem2/ecd6.i/20121003PEST.b/ical-1.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	1003A023	1003A024	1003A025	1003A026	1003A027	1003A028	1003A029
INJ.DATE:	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012	03-OCT-2012
INJ.TIME:	19:19	19:37	19:55	20:12	20:30	20:48	21:06

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.210	2.160-2.260	+++++	+++++
* 54 1Bromo-2nitrobenzene	3.015	3.015	3.015	3.015	3.015	3.015	3.015	3.015	2.965-3.065	3.015	0.000
* 58 Hexabromobiphenyl	8.750	8.750	8.750	8.750	8.750	8.750	8.750	8.750	8.700-8.800	8.750	0.000
$ 2 Tetrachloro-m-xylene	3.670	3.670	3.670	3.670	3.670	3.670	3.670	3.670	3.620-3.720	3.670	0.000
3 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.002	3.952-4.052	+++++	+++++
4 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.147	4.097-4.197	+++++	+++++
5 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.424	4.374-4.474	+++++	+++++
6 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.497	4.447-4.547	+++++	+++++
7 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.663	4.613-4.713	+++++	+++++
8 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.862	4.812-4.912	+++++	+++++
9 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.149	5.098-5.199	+++++	+++++
38 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.577-13.677	+++++	+++++
10 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.819-10.919	+++++	+++++
11 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.723	5.673-5.773	+++++	+++++
12 gamma-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.842	5.792-5.892	+++++	+++++
13 alpha-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.967	5.917-6.017	+++++	+++++
14 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.099	6.049-6.149	+++++	+++++

Reviewer 1 AR Date: 10/4/2012
Reviewer 2 _____ Date: _____

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Batch File: /chem2/ecd6.i/20121003PEST.b/ical-1.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
15 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.027	5.977-6.077	+++++	+++++
16 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.322	6.272-6.372	+++++	+++++
17 Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.540	6.490-6.590	+++++	+++++
18 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.584	6.534-6.634	+++++	+++++
19 Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.746	6.696-6.796	+++++	+++++
20 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.842	6.792-6.892	+++++	+++++
21 Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.123	7.073-7.173	+++++	+++++
22 Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.271	7.221-7.321	+++++	+++++
23 Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.514	7.464-7.564	+++++	+++++
24 Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.766	7.716-7.816	+++++	+++++
$ 25 Decachlorobiphenyl	8.610	8.610	8.610	8.610	8.610	8.610	8.610	8.610	8.560-8.660	8.610	0.000
26 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.715-3.815	+++++	+++++
27 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.831-4.931	+++++	+++++
28 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.309-5.409	+++++	+++++
29 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.715-3.815	+++++	+++++
30 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.368-4.468	+++++	+++++
31 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.207-5.307	+++++	+++++
32 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	5.995-6.095	+++++	+++++
33 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.251-8.351	+++++	+++++
34 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.209-11.309	+++++	+++++
35 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.496	6.446-6.546	+++++	+++++
39 2,4-DDE	5.704	5.704	5.704	5.703	5.703	5.704	5.703	5.703	5.653-5.753	5.703	0.000

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Batch File: /chem2/ecd6.i/20121003PEST.b/ical-1.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	6.191	6.191	6.191	6.191	6.191	6.190	6.190	6.190	6.140-6.240	6.191	0.000
41 2,4-DDT	6.429	6.429	6.429	6.429	6.429	6.429	6.429	6.429	6.379-6.479	6.429	0.000
42 Hexachloroethane	0.000	0.000	0.000	1.738	0.000	0.000	0.000	1.738	1.688-1.788	0.248	0.657
43 Oxychlordane	5.627	5.627	5.627	5.627	5.627	5.627	5.627	5.627	5.577-5.677	5.627	0.000
44 trans-Nonachlor	5.951	5.951	5.951	5.951	5.950	5.951	5.951	5.951	5.901-6.001	5.951	0.000
45 cis-Nonachlor	6.567	6.567	6.567	6.566	6.567	6.566	6.566	6.566	6.516-6.616	6.567	0.000
46 Mirex	7.437	7.437	7.437	7.437	7.437	7.437	7.437	7.437	7.387-7.487	7.437	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.106-20.206	+++++	+++++
59 Tech-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.518	4.468-4.568	+++++	+++++
48 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.269-6.369	+++++	+++++
49 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.886-9.986	+++++	+++++
50 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.841-11.941	+++++	+++++
51 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.777-14.877	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.700-9.800	+++++	+++++
55 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.057-9.157	+++++	+++++
56 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.201-10.301	+++++	+++++

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	5287634	4060064	-23.2
Hexabromobiphenyl	5848031	3748709	-35.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	23737838	21032891	-11.4
Hexabromobiphenyl	17554181	14864285	-15.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: DS ARI Job No.: 20121003PEST

Analysis Date: 03-OCT-2012 15:10 Init. Calib. Date: 03-OCT-2012

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
4,4'-DDE	6.028	129828
Endrin	6.540	4737698
4,4'-DDD	6.583	154711
4,4'-DDT	6.842	4383976
Endrin ketone	7.767	279182
Endrin aldehyde	7.124	83451

DDT Percent Breakdown = 6.1 %
((129828+154711) * 100)/(129828+154711+4383976)

Endrin Percent Breakdown = 7.1 %
((83451+279182) * 100)/(83451+279182+4737698)

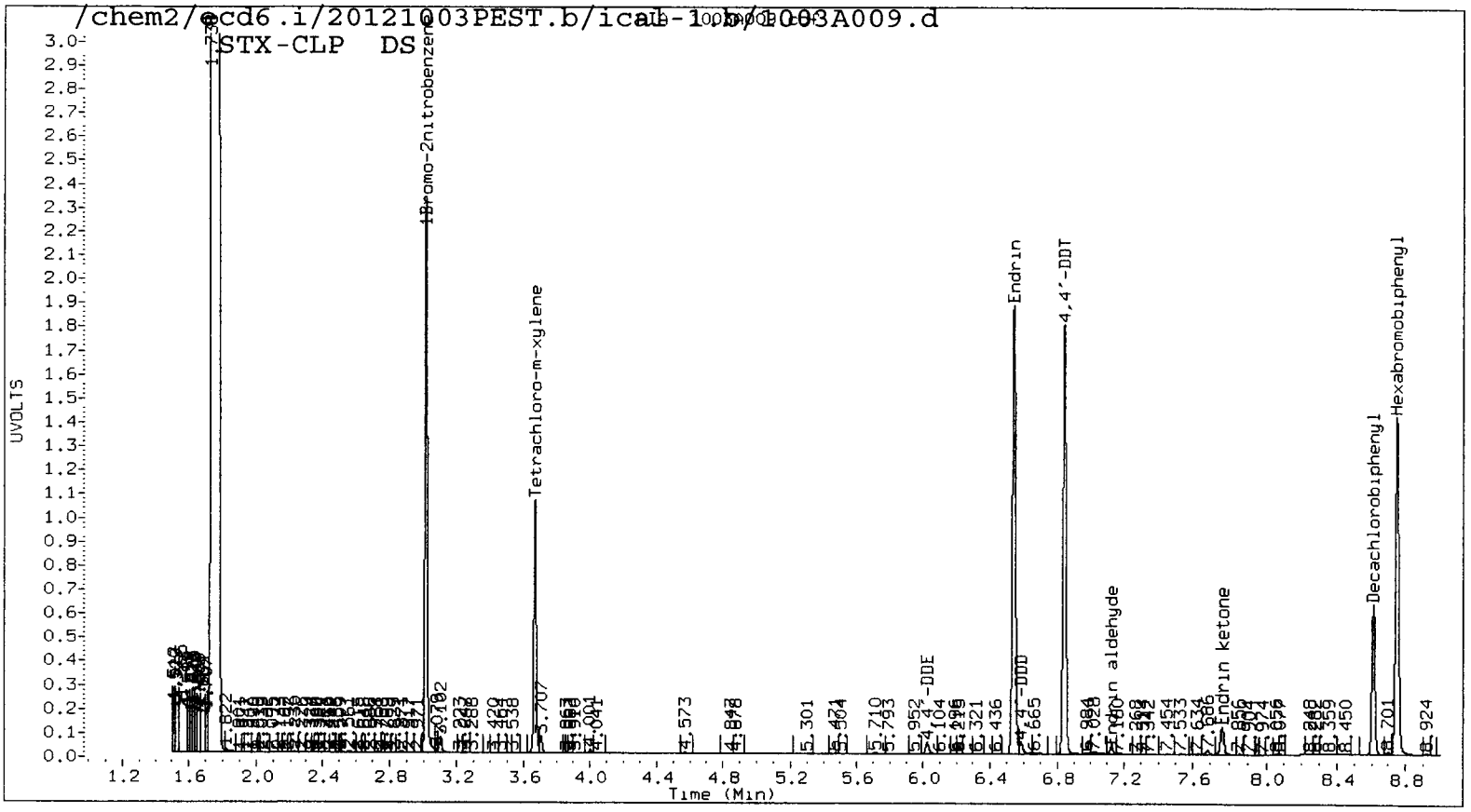
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
4,4'-DDE	6.744	694290
Endrin	7.227	20939129
4,4'-DDD	7.282	1150787
4,4'-DDT	7.570	21036406
Endrin ketone	8.447	1215962
Endrin aldehyde	7.715	480634

DDT Percent Breakdown = 8.1 %
((694290+1150787) * 100)/(694290+1150787+21036406)

Endrin Percent Breakdown = 7.5 %
((480634+1215962) * 100)/(480634+1215962+20939129)

Form VII Pest-1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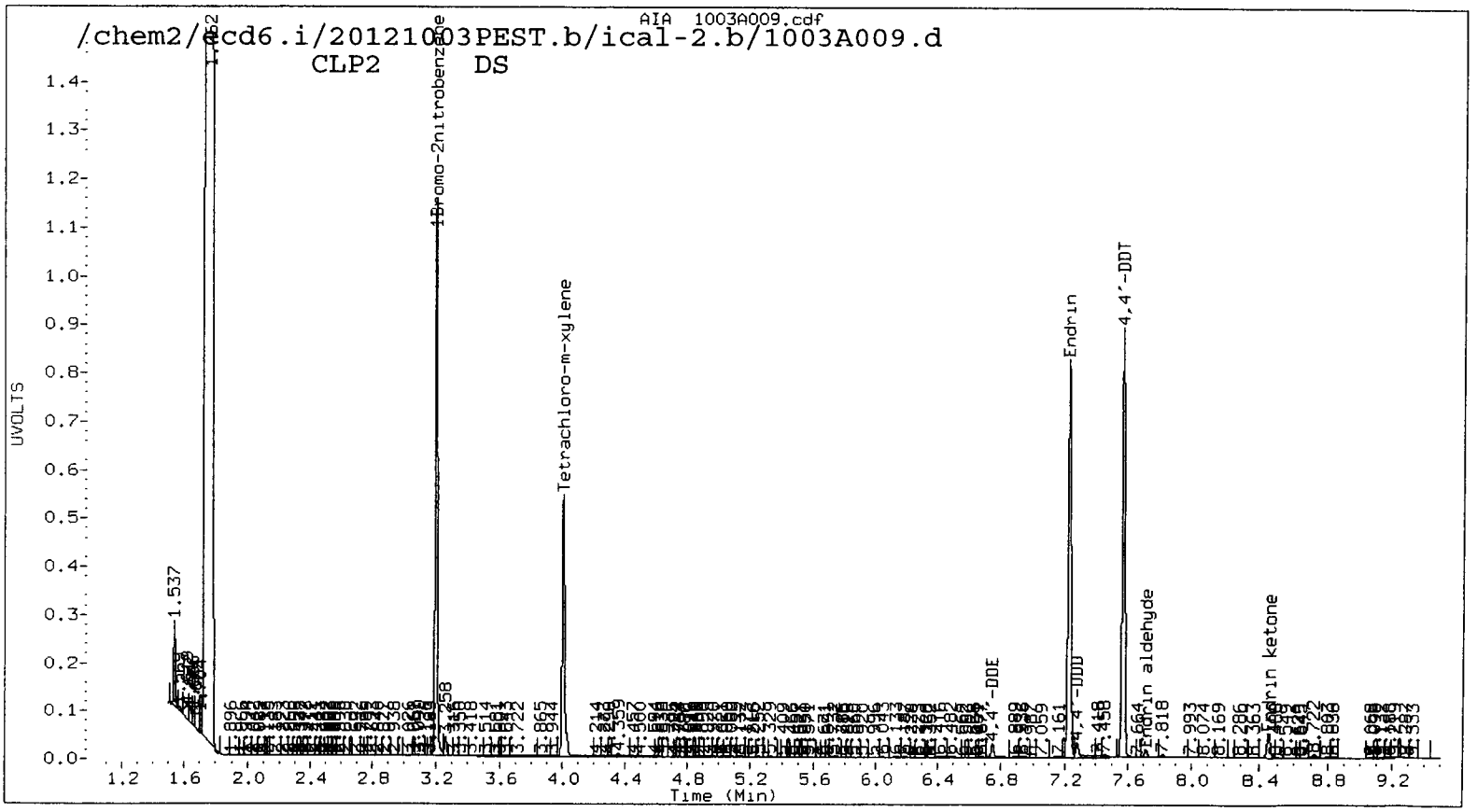
Tetrachloro-m-xylene
Endrin
4,4'-DDT
Decachlorobiphenyl
Hexabromobiphenyl
4,4'-DDE
4,4'-DDD
Endrin aldehyde
Endrin ketone
UVOLTS
Time (Min)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CLP2 DS
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1.762
4Bromo-2nitrobenzene
Tetrachloro-m-xylene
Endrin
4,4'-DDT
4,4'-DDE
4,4'-DDD
Endrin aldehyde
Endrin ketone
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A010.d ARI ID: IB
Data file 2: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A010.d Client ID:
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 03-OCT-2012 15:27
Compound Sublist: wpest Report Date: 10/04/2012 10:59
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.015	0.001	4103626	3.195	0.000	20811653	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
----			4.606	0.021	1044	0.0000	0.0023	---	alpha-BHC
----			5.050	0.043	7493	0.0000	0.0408	---	beta-BHC
----			5.327	0.013	3004	0.0000	0.0083	---	delta-BHC
----			4.925	-0.011	4608	0.0000	0.0112	---	gamma-BHC (Lindane)
4.847	-0.014	1134	----			0.0178	0.0000	---	Heptachlor
----			5.732	-0.003	56026	0.0000	0.1516	---	Aldrin
----			6.311	0.017	4705	0.0000	0.0141	---	Heptachlor epoxide b
----			6.648	-0.032	2563	0.0000	0.0086	---	Endosulfan I
----			6.967	0.028	1742	0.0000	0.0055	---	Dieldrin
----			6.744	-0.002	6369	0.0000	0.0211	---	4,4'-DDE
----			7.199	-0.029	2168	0.0000	0.0085	---	Endrin
----			7.421	0.005	1443	0.0000	0.0056	---	Endosulfan II
----			7.281	-0.002	4668	0.0000	0.0193	---	4,4'-DDD
----			7.994	0.034	1856	0.0000	0.0086	---	Endosulfan sulfate
----			7.573	0.002	10627	0.0000	0.0463	---	4,4'-DDT
----			8.183	0.025	3290	0.0000	0.0336	---	Methoxychlor
7.762	-0.004	12452	8.451	0.002	2651	0.2547	0.0124	181.5*	Endrin ketone
7.125	0.001	1590	7.708	-0.007	3978	0.0397	0.0198	67.0*	Endrin aldehyde
5.794	-0.048	5701	6.484	0.008	17598	0.0914	0.0506	57.4*	gamma-Chlordane
----			6.625	0.010	2169	0.0000	0.0067	---	alpha-Chlordane
2.229	0.019	5725	2.368	-0.009	2576	0.0618	0.0057	166.2*	Hexachlorobutadiene
4.001	-0.001	27480	4.458	0.001	5327	0.4109	0.0136	187.2*	Hexachlorobenzene
----			6.231	0.028	4801	0.0000	0.0181	---	Oxychlordane
----			6.440	-0.014	1990	0.0000	0.0104	---	2,4-DDE
5.956	0.005	1123	6.570	0.009	1716	0.0202	0.0056	113.4*	trans-Nonachlor
----			6.936	-0.003	1182	0.0000	0.0071	---	2,4-DDD
----			7.225	-0.002	6574	0.0000	0.0363	---	2,4-DDT
----			----			0.0000	0.0000	---	cis-Nonachlor
----			8.423	-0.011	6159	0.0000	0.0346	---	Mirex
8.750	0.000	3763922	10.106	0.001	14817201	80.0000	80.0000	0.0	Hexabromobiphenyl
1.738	0.000	778151	1.701	-0.027	1065269	0.0000	0.0000	---	Hexachloroethane
3.670	0.000	2058750	4.007	0.000	12255032	33.8582	33.8790	0.1	Tetrachloro-m-xylen
8.610	0.000	1611572	9.566	0.000	7450885	32.0375	32.7016	2.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	84.6	84.7	84.6~	130- 0
Decachlorobiphenyl	80.1	81.8	80.1~	130- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4103626	1.1
Hexabromobiphenyl	3748709	3763922	0.4

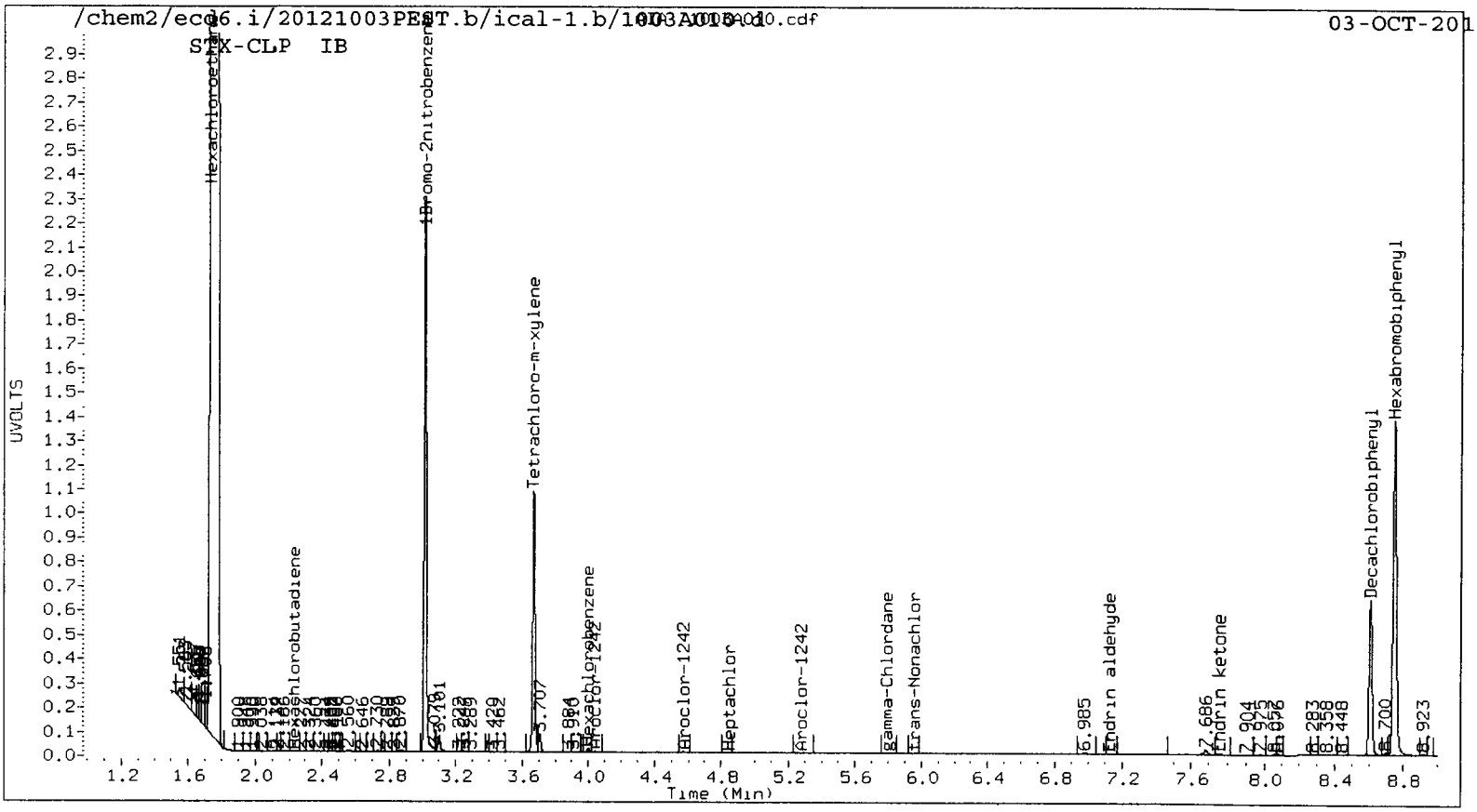
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	20811653	-1.1
Hexabromobiphenyl	14864285	14817201	-0.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col			
Aroclor	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	---			0.000	1	7.134	-0.030	3928	0.441
Toxaphene	2	---			0.000	2	7.459	-0.029	100077	7.603
Toxaphene	3	---			0.000	3	7.708	-0.011	3978	0.270
Toxaphene	4	---			0.000	4	8.183	-0.002	3290	0.299
Toxaphene	5	---			0.000	5	8.575	0.042	2632	0.510
Toxaphene	6	---			0.000	NS	---			----
		STX-CLPAve: <3 Quant Peaks					CLP2Ave: 1.825			
Aroclor-1016	1	---			0.000	1	---			0.000
Aroclor-1016	2	---			0.000	2	---			0.000
Aroclor-1016	3	---			0.000	3	---			0.000
Aroclor-1016	4	---			0.000	4	---			0.000
Aroclor-1016	5	---			0.000	5	---			0.000
		STX-CLPAve: <3 Quant Peaks					CLP2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.000	1	---			0.000
Aroclor-1221	2	---			0.000	2	---			0.000
Aroclor-1221	3	---			0.000	3	---			0.000
Aroclor-1221	4	---			0.000	4	---			0.000
		STX-CLPAve: <3 Quant Peaks					CLP2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.000	1	---			0.000
Aroclor-1232	2	---			0.000	2	---			0.000
Aroclor-1232	3	---			0.000	3	---			0.000
Aroclor-1232	4	---			0.000	4	---			0.000
Aroclor-1232	5	---			0.000	5	---			0.000
		STX-CLPAve: <3 Quant Peaks					CLP2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.000	1	---			0.000
Aroclor-1242	2	---			0.000	2	---			0.000
Aroclor-1242	3	---			0.000	3	---			0.000
Aroclor-1242	4	---			0.000	4	---			0.000
Aroclor-1242	5	---			0.000	5	---			0.000
Aroclor-1242	6	---			0.000	NS	---			----

	STX-CLPAve: <3 Quant Peaks				CLP2Ave: <3 Quant Peaks		
Aroclor-1248 1	---	0.000		1	---	0.000	
Aroclor-1248 2	---	0.000		2	---	0.000	
Aroclor-1248 3	---	0.000		3	---	0.000	
Aroclor-1248 4	---	0.000		4	---	0.000	
Aroclor-1248 5	---	0.000		5	---	0.000	
	STX-CLPAve: <3 Quant Peaks				CLP2Ave: <3 Quant Peaks		
Aroclor-1254 1	---	0.000		1	---	0.000	
Aroclor-1254 2	---	0.000		2	---	0.000	
Aroclor-1254 3	---	0.000		3	---	0.000	
Aroclor-1254 4	---	0.000		4	---	0.000	
Aroclor-1254 5	---	0.000		5	---	0.000	
	STX-CLPAve: <3 Quant Peaks				CLP2Ave: <3 Quant Peaks		
Aroclor-1260 1	---	0.000		1	---	0.000	
Aroclor-1260 2	---	0.000		2	---	0.000	
Aroclor-1260 3	---	0.000		3	---	0.000	
Aroclor-1260 4	---	0.000		4	---	0.000	
Aroclor-1260 5	---	0.000		5	---	0.000	
	STX-CLPAve: <3 Quant Peaks				CLP2Ave: <3 Quant Peaks		
Aroclor-1262 1	---	0.000		1	---	0.000	
Aroclor-1262 2	---	0.000		2	---	0.000	
Aroclor-1262 3	---	0.000		3	---	0.000	
Aroclor-1262 4	---	0.000		4	---	0.000	
Aroclor-1262 5	---	0.000		5	---	0.000	
	STX-CLPAve: <3 Quant Peaks				CLP2Ave: <3 Quant Peaks		
Aroclor-1268 1	---	0.000		1	---	0.000	
Aroclor-1268 2	---	0.000		2	---	0.000	
Aroclor-1268 3	---	0.000		3	---	0.000	
Aroclor-1268 4	---	0.000		4	---	0.000	
Aroclor-1268 5	---	0.000		5	---	0.000	
	STX-CLPAve: <3 Quant Peaks				CLP2Ave: <3 Quant Peaks		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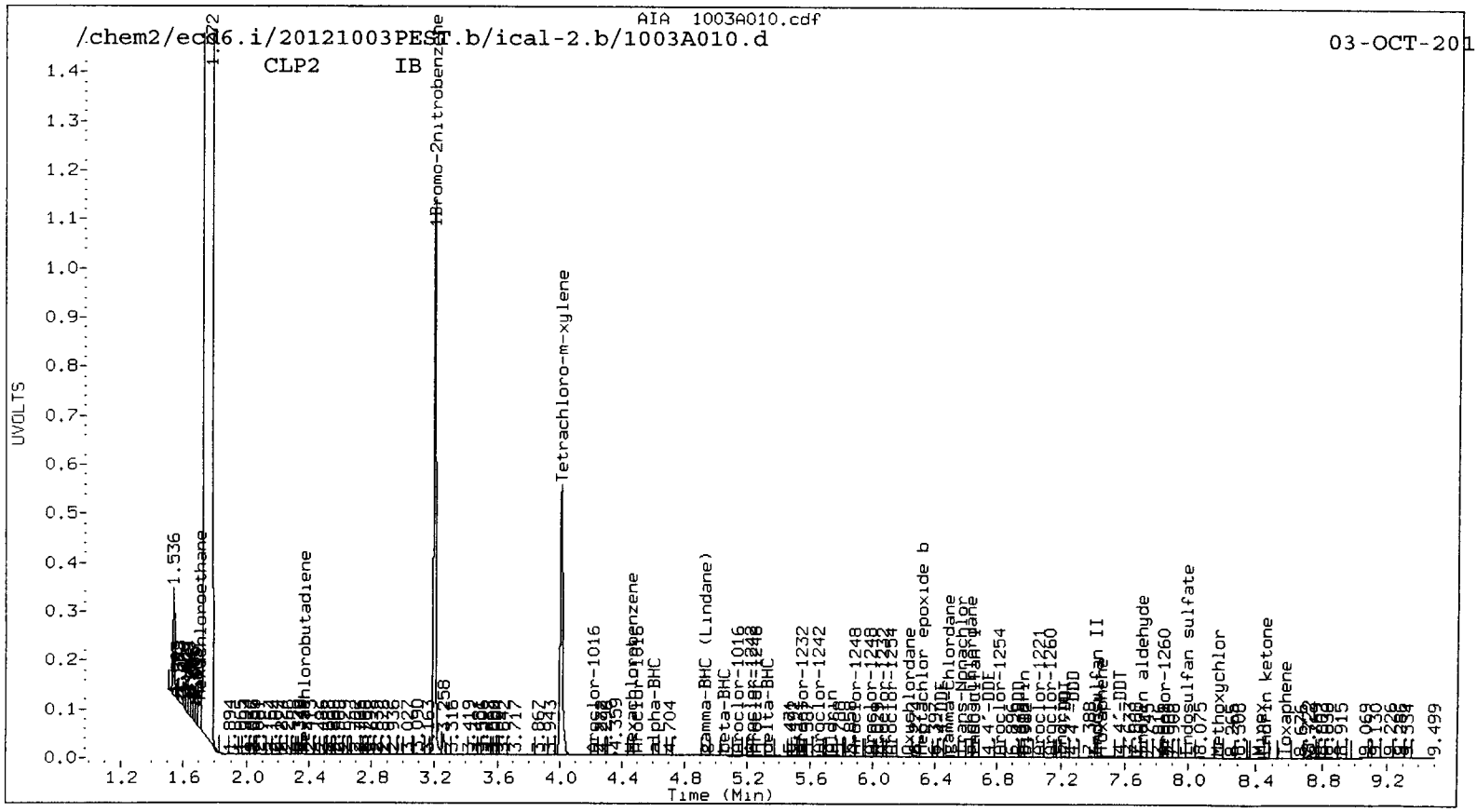
1003A010.cdf
03-OCT-201
SIX-CLP IB
UVOLTS
Time (Min)
Hexachloroethane
Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobutadiene
Aroclor-1242
Heptachlor
Gamma-Chlordane
Trans-Nonachlor
Endrin aldehyde
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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AIA 1003A010.cdf
03-OCT-201
CLP2 IB
UVOLTS
Time (Min)
Hexachloroethane
Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobutadiene
Aroclor-1016
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
Aroclor-1242
Aroclor-1248
Aroclor-1254
Aroclor-1260
Endosulfan II
Endosulfan sulfate
Methoxychlor
Endrin ketone
Toxaphene

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A011.d ARI ID: INDAE
Data file 2: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A011.d Client ID:
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Compound Sublist: INDA
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: ar

Injection Date: 03-OCT-2012 15:45
Report Date: 10/04/2012 10:59
Matrix: NONE
Dilution Factor: 1.000

STX-CLP Col RT	Shift	Response	CLP2 Col RT	Shift	Response	STX-CLP on col	CLP2 on col	RPD	Compound/Flag
3.015	0.001	4243841	3.195	0.000	21862472	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.147	0.000	1535379	4.585	-0.001	9334218	19.4134	19.5713	0.8	alpha-BHC
4.497	0.000	596591	5.006	-0.001	3588059	17.8451	18.5881	4.1	beta-BHC
4.663	0.000	1239100	5.314	0.000	7494896	19.4365	19.8100	1.9	delta-BHC
4.424	0.000	1386207	4.936	0.000	8315328	19.0776	19.2863	1.1	gamma-BHC (Lindane)
4.862	0.000	1226891	5.396	-0.001	7484260	18.6231	18.9596	1.8	Heptachlor
5.148	0.000	1262811	5.735	0.000	7333340	18.7699	18.8925	0.7	Aldrin
5.723	0.000	1184994	6.293	0.000	6529772	18.2719	18.6610	2.1	Heptachlor epoxide b
6.100	0.000	1099475	6.680	-0.001	5919132	18.3195	18.8375	2.8	Endosulfan I
6.322	0.000	2324426	6.938	-0.001	12283565	37.4681	36.9536	1.4	Dieldrin
6.027	0.000	2169789	6.744	-0.001	11760541	37.8807	37.1061	2.1	4,4'-DDE
6.540	0.000	2029056	7.227	-0.001	9904255	37.9835	37.1704	2.2	Endrin
6.746	0.000	1884435	7.416	-0.001	9816223	36.5308	36.8560	0.9	Endosulfan II
6.583	-0.001	1762343	7.282	-0.001	9472208	37.7821	37.6409	0.4	4,4'-DDD
7.514	0.000	1614928	7.959	-0.001	8479989	37.1938	37.8644	1.8	Endosulfan sulfate
6.842	-0.001	1782695	7.570	-0.001	8981049	38.0103	37.5030	1.3	4,4'-DDT
7.271	0.000	4047645	8.156	-0.003	16738737	176.5215	163.8318	7.5	Methoxychlor
7.767	0.000	1835612	8.447	-0.001	8111794	36.1518	36.2597	0.3	Endrin ketone
7.124	0.000	1530357	7.715	0.000	7757642	36.7869	36.9986	0.6	Endrin aldehyde
5.843	0.000	1188786	6.475	-0.001	6799397	18.4345	18.6266	1.0	gamma-Chlordane
5.967	0.000	1137815	6.614	-0.001	6371726	18.2823	18.7211	2.4	alpha-Chlordane
2.210	0.000	1744880	2.376	-0.001	8172185	18.2043	17.2169	5.6	Hexachlorobutadiene
4.002	0.000	1221989	4.458	0.000	7455036	17.6689	18.1647	2.8	Hexachlorobenzene
8.750	0.000	3909614	10.105	0.000	15444423	80.0000	80.0000	0.0	Hexabromobiphenyl
3.670	0.000	2292564	4.007	-0.001	13637228	36.4578	35.8881	1.6	Tetrachloro-m-xylen
8.610	0.000	1795027	9.565	-0.001	8328108	34.3548	35.0673	2.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	91.1	89.7	89.7~	115- 0
Decachlorobiphenyl	85.9	87.7	85.9~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

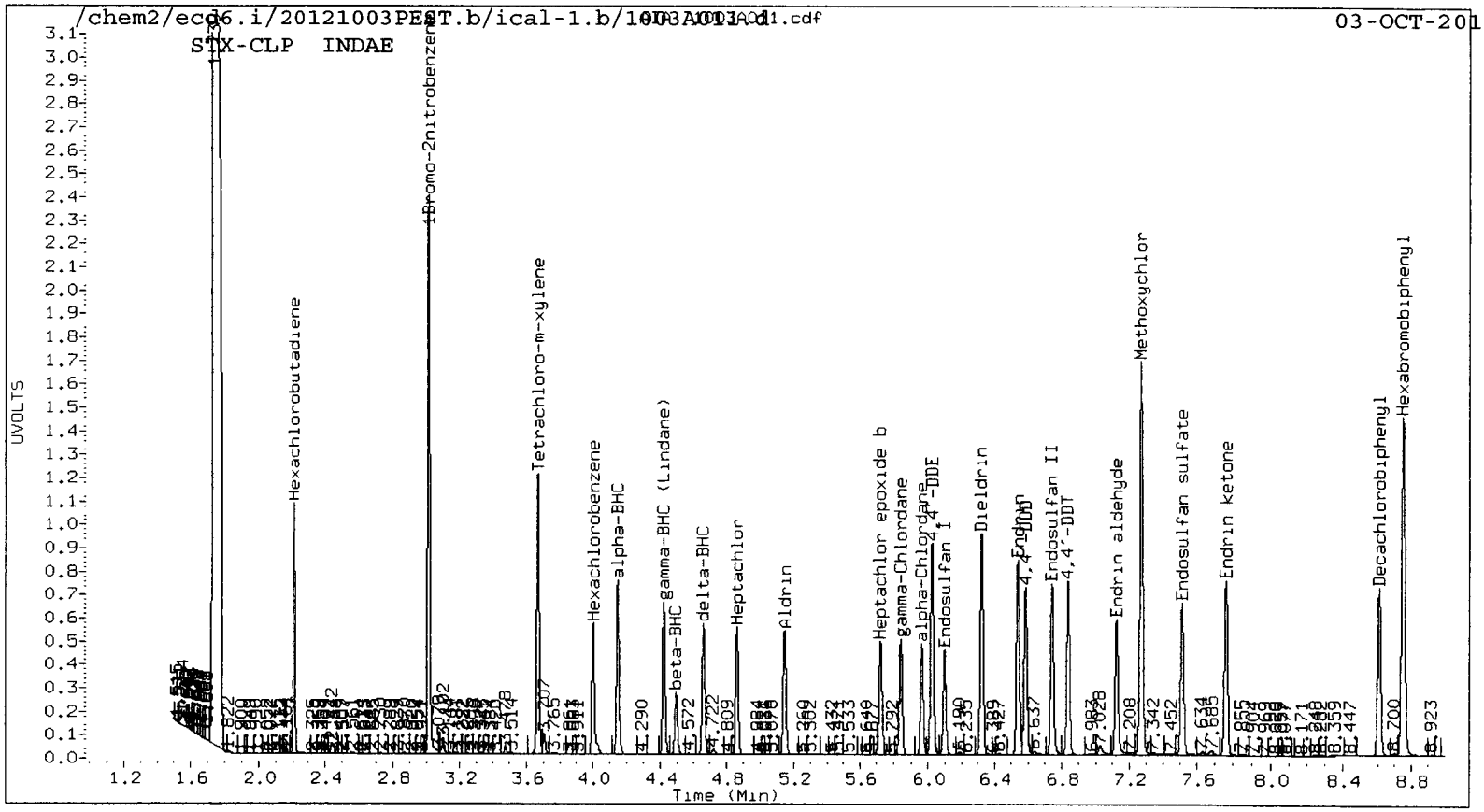
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4243841	4.5
Hexabromobiphenyl	3748709	3909614	4.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	21862472	3.9
Hexabromobiphenyl	14864285	15444423	3.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount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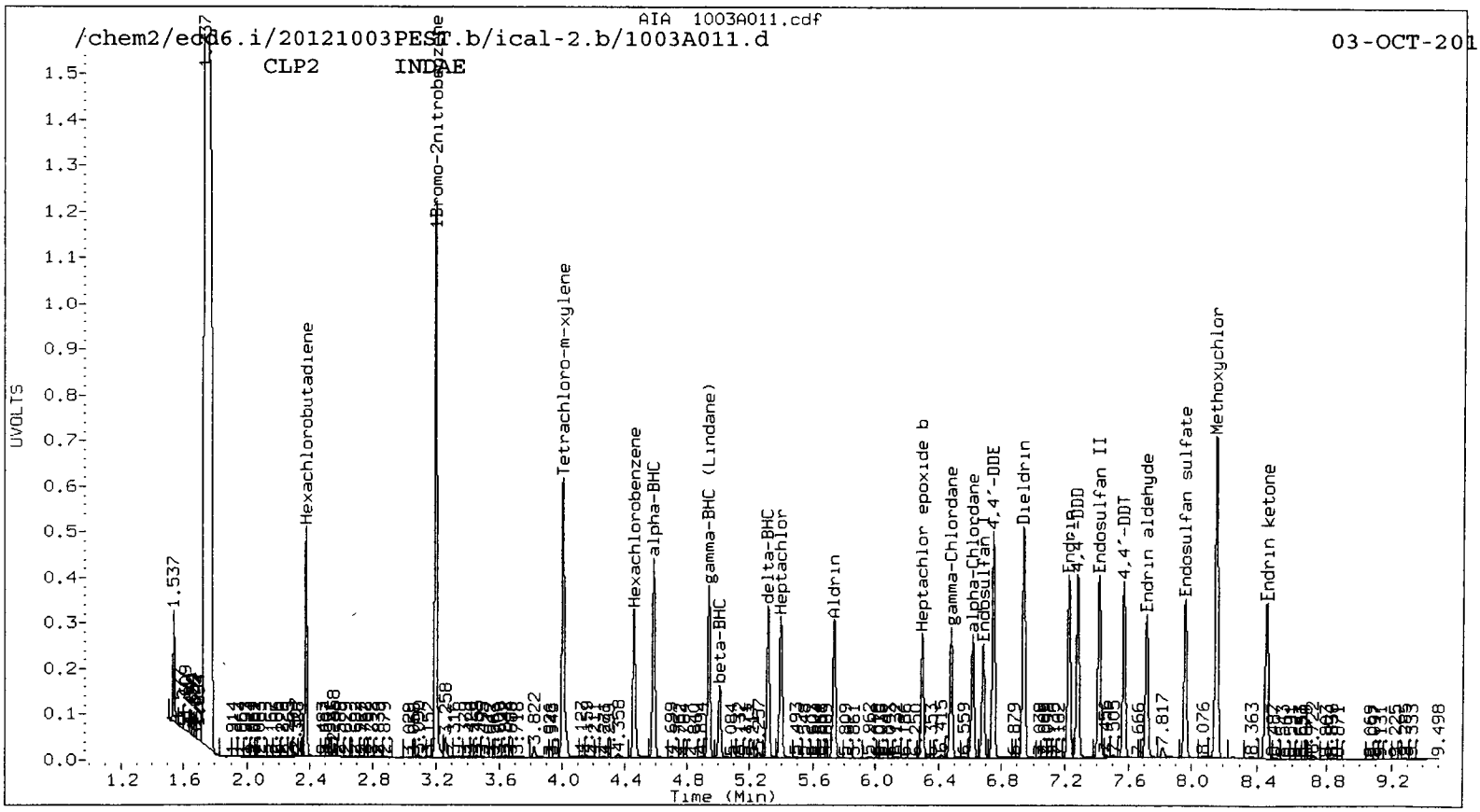
1003A011.cdf
03-OCT-201
STX-CLP INDAE
UVOLTS
Time (Min)
Hexachlorobutadiene
Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Endosulfan I
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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03-OCT-201
CLP2 INDAE
UVOLTS
Time (Min)
Hexachlorobutadiene
Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Dieldrin
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A012.d ARI ID: WNDE
Data file 2: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A012.d Client ID:
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 03-OCT-2012 16:03
Compound Sublist: WND Report Date: 10/04/2012 10:59
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
----			1.735	0.007	79644381	0.0000	0.0000	---	Hexachloroethane
3.015	0.000	3953778	3.195	0.000	20286067	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
5.628	0.000	1783657	6.203	0.000	10156774	39.2013	39.2626	0.2	Oxychlordane
5.704	0.001	1320612	6.454	0.000	7104051	39.4894	37.9736	3.9	2,4-DDE
5.951	0.000	2146506	6.560	-0.001	11964879	39.6099	39.4503	0.4	trans-Nonachlor
6.191	0.001	1168742	6.939	0.001	6346802	39.0122	38.8494	0.4	2,4-DDD
6.430	0.001	1318802	7.227	0.000	6909377	38.8886	38.7669	0.3	2,4-DDT
6.567	0.001	2299347	7.286	0.000	12452499	40.0572	39.2683	2.0	cis-Nonachlor
7.438	0.001	1439082	8.434	0.001	6440095	37.6639	36.7312	2.5	Mirex
8.751	0.001	3659278	10.106	0.001	14586432	80.0000	80.0000	0.0	Hexabromobiphenyl
3.670	0.000	1919385	4.007	-0.001	11829871	32.7625	33.5510	2.4	Tetrachloro-m-xylen
8.610	0.000	1534597	9.566	0.000	7180154	31.3797	32.0120	2.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	81.9	83.9	81.9~	150- 0
Decachlorobiphenyl	78.4	80.0	78.4~	150- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

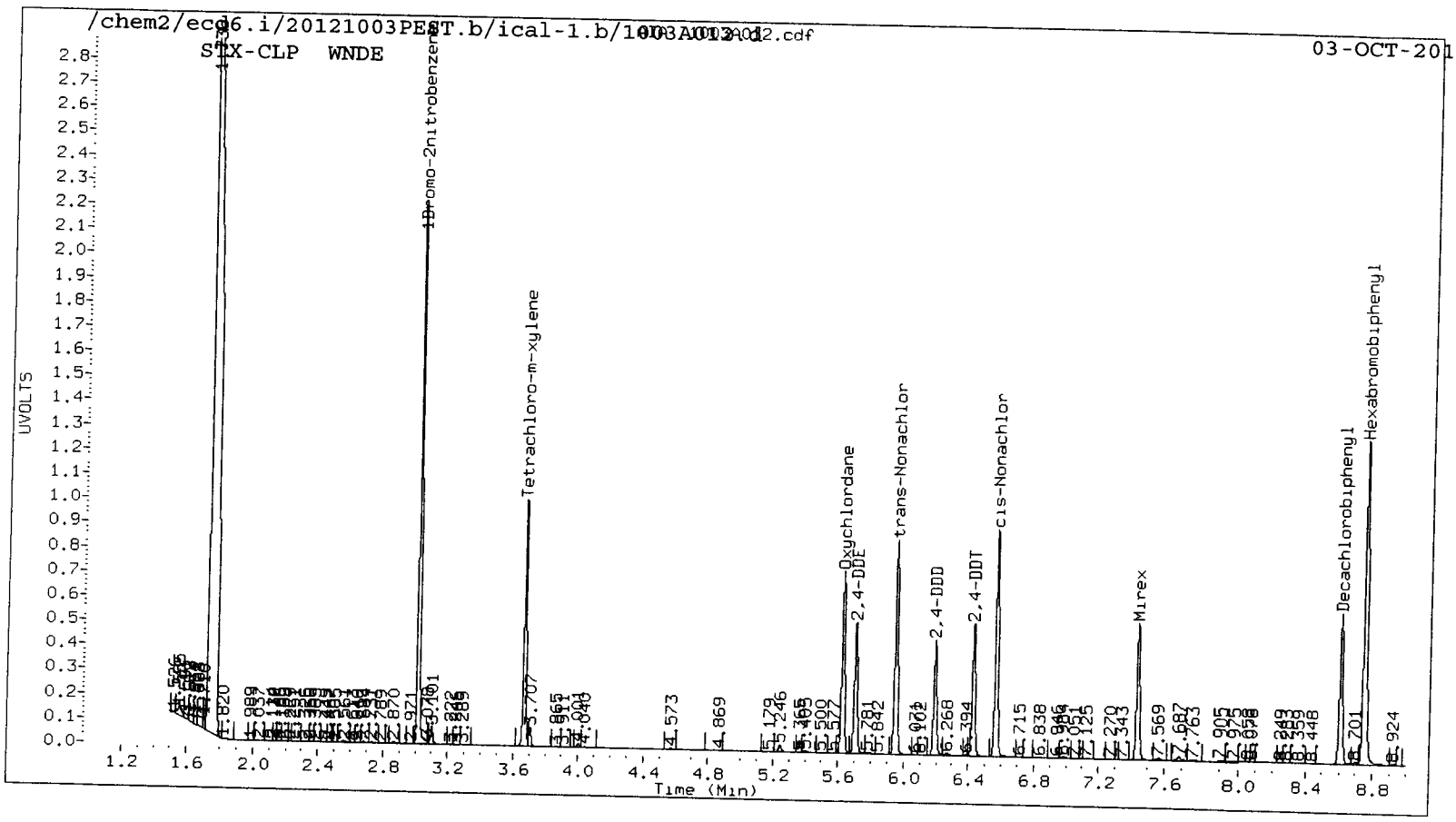
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	3953778	-2.6
Hexabromobiphenyl	3748709	3659278	-2.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	20286067	-3.6
Hexabromobiphenyl	14864285	14586432	-1.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount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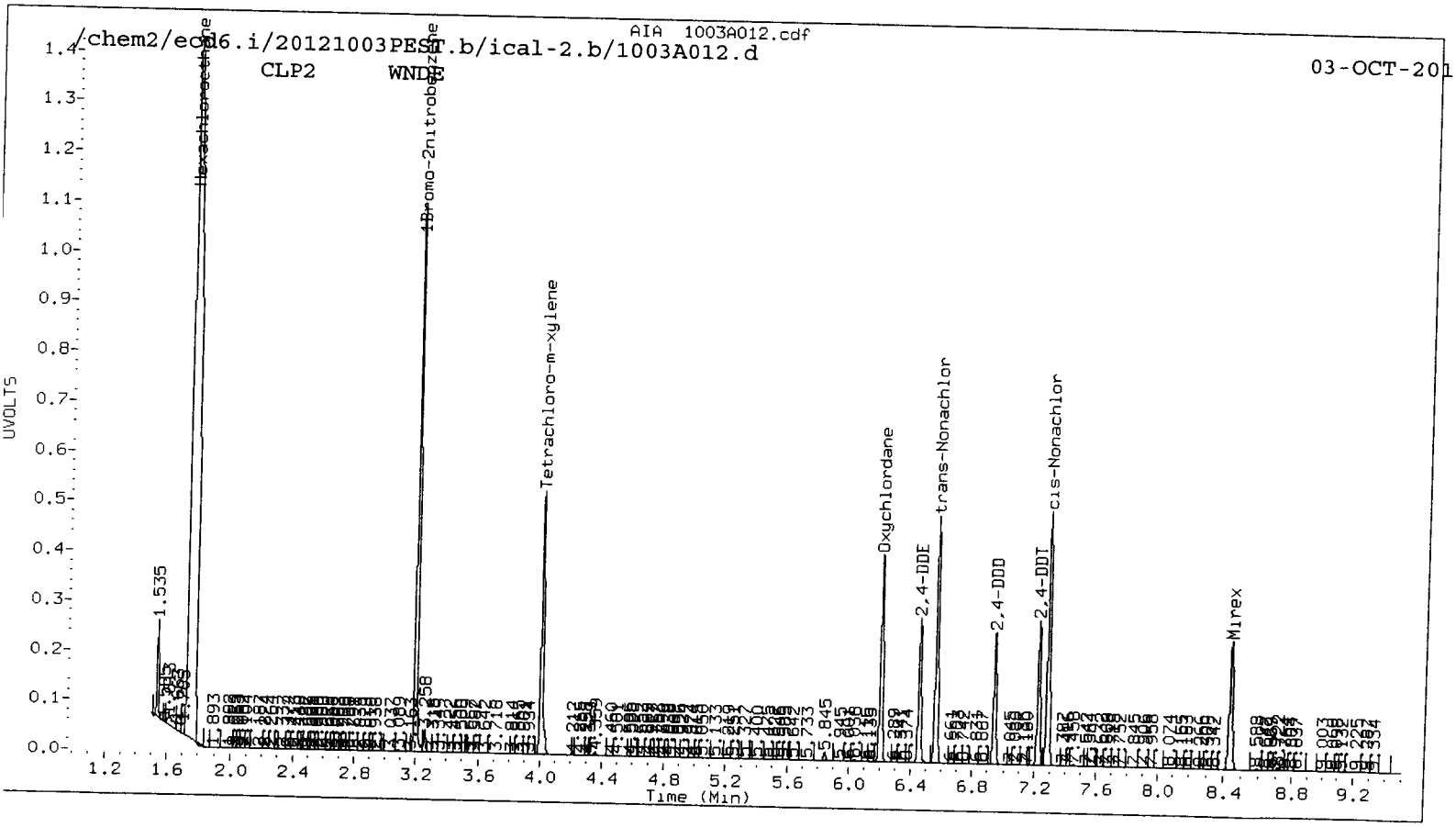
1003A012.cdf
STX-CLP WNDE
03-OCT-201
UVOLTS
Time (Min)
1-Bromo-2-nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex
Decachlorobiphenyl
Hexabromobiphenyl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AIA 1003A012.cdf
CLP2 WNDE
03-OCT-201
UVOLTS
Time (Min)
Hexachloroethane
1-Bromo-2-nitrobenzene
Tetrachloro-m-xylene
Oxychlordane
2,4-DDE
trans-Nonachlor
2,4-DDD
2,4-DDT
cis-Nonachlor
Mirex

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A014.d ARI ID: INDAE
Data file 2: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A014.d Client ID:
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 03-OCT-2012 16:39
Compound Sublist: INDA Report Date: 10/04/2012 10:59
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.015	0.000	4060064	3.195	0.000	21032891	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.147	0.000	1520984	4.584	-0.001	9260940	20.1019	20.1835	0.4	alpha-BHC
4.497	0.000	592449	5.007	0.000	3547307	18.5233	19.1018	3.1	beta-BHC
4.663	0.000	1226976	5.314	-0.001	7429371	20.1175	20.4114	1.5	delta-BHC
4.424	0.000	1375521	4.936	0.000	8261538	19.7874	19.9173	0.7	gamma-BHC (Lindane)
4.862	0.000	1222118	5.397	0.000	7442945	19.3904	19.5986	1.1	Heptachlor
5.148	0.000	1255499	5.735	0.000	7405273	19.5059	19.8303	1.6	Aldrin
5.723	0.000	1188428	6.293	0.000	6511616	19.1544	19.3431	1.0	Heptachlor epoxide b
6.099	0.000	1093516	6.680	-0.001	5876753	19.0450	19.4404	2.1	Endosulfan I
6.322	0.000	2314732	6.938	-0.001	12264975	39.0008	38.3530	1.7	Dieldrin
6.027	0.000	2157945	6.744	-0.001	11722458	39.3792	38.4447	2.4	4,4'-DDE
6.540	0.000	2016318	7.228	0.000	9872960	39.3652	38.4991	2.2	Endrin
6.745	-0.001	1906317	7.416	-0.001	9793607	38.5412	38.2062	0.9	Endosulfan II
6.584	0.000	1753499	7.282	-0.001	9447717	39.2061	39.0088	0.5	4,4'-DDD
7.513	0.000	1604029	7.960	0.000	8413226	38.5285	39.0325	1.3	Endosulfan sulfate
6.841	-0.001	1774418	7.571	0.000	9013742	39.4578	39.1085	0.9	4,4'-DDT
7.271	0.000	4037595	8.156	-0.003	16702852	183.6412	169.8610	7.8	Methoxychlor
7.766	0.000	1813756	8.448	-0.001	8119226	37.2546	37.7094	1.2	Endrin ketone
7.123	0.000	1512891	7.715	0.000	7706684	37.9281	38.1901	0.7	Endrin aldehyde
5.843	0.000	1178085	6.475	-0.001	6818550	19.0955	19.4158	1.7	gamma-Chlordane
5.967	0.000	1131738	6.614	-0.001	6335027	19.0077	19.3474	1.8	alpha-Chlordane
2.210	0.000	1729192	2.376	-0.001	8724669	18.8572	19.1059	1.3	Hexachlorobutadiene
4.002	-0.001	1214867	4.458	0.000	7404274	18.3610	18.7525	2.1	Hexachlorobenzene
8.750	0.000	3748709	10.105	0.000	14864285	80.0000	80.0000	0.0	Hexabromobiphenyl
3.670	0.000	2291209	4.007	-0.001	13613609	38.0855	37.2389	2.2	Tetrachloro-m-xylen
8.610	0.000	1786536	9.565	-0.001	8314170	35.6599	36.3750	2.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	95.2	93.1	93.1~	115- 0
Decachlorobiphenyl	89.1	90.9	89.1~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

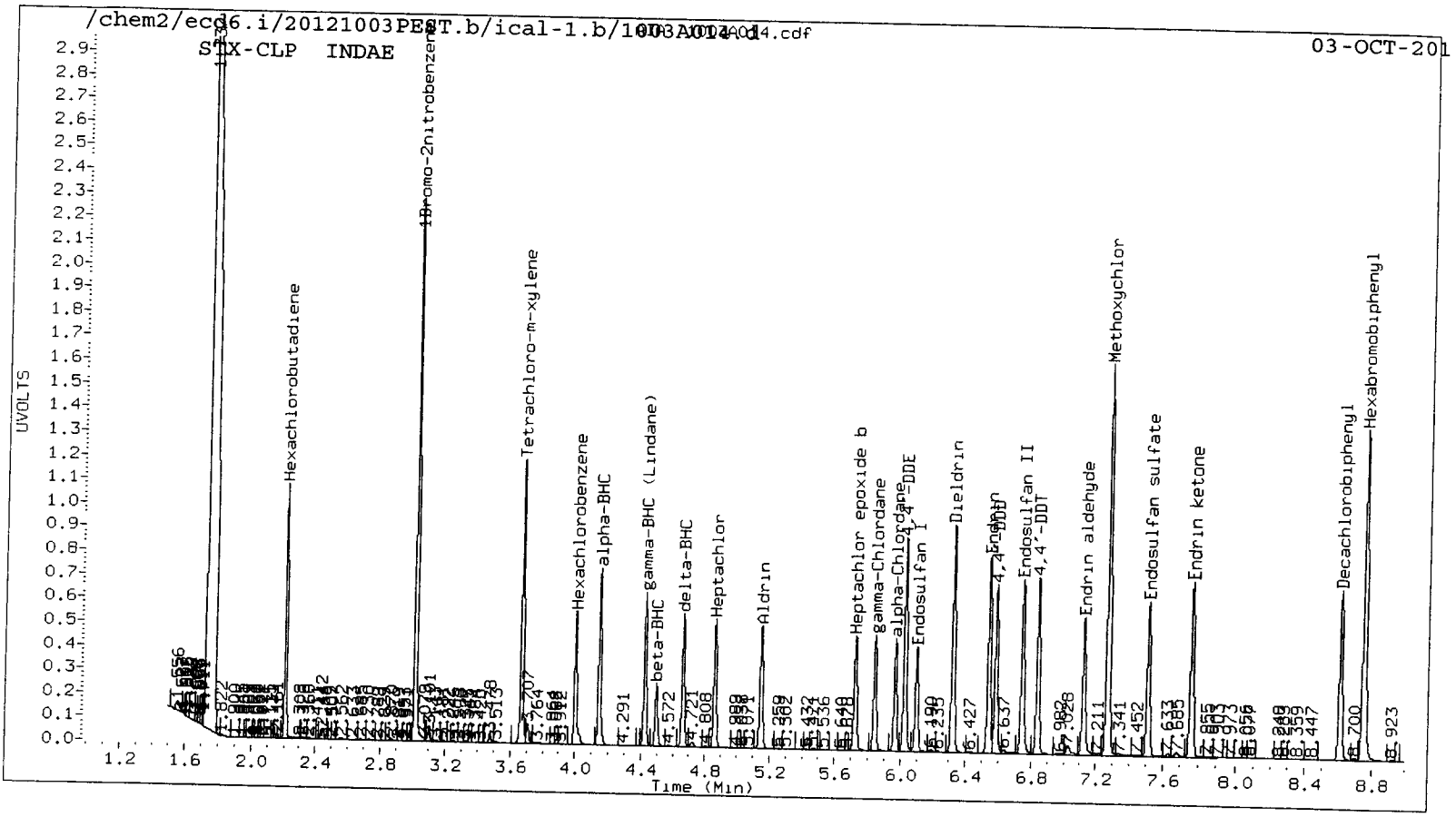
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4060064	0.0
Hexabromobiphenyl	3748709	3748709	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	21032891	0.0
Hexabromobiphenyl	14864285	14864285	0.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount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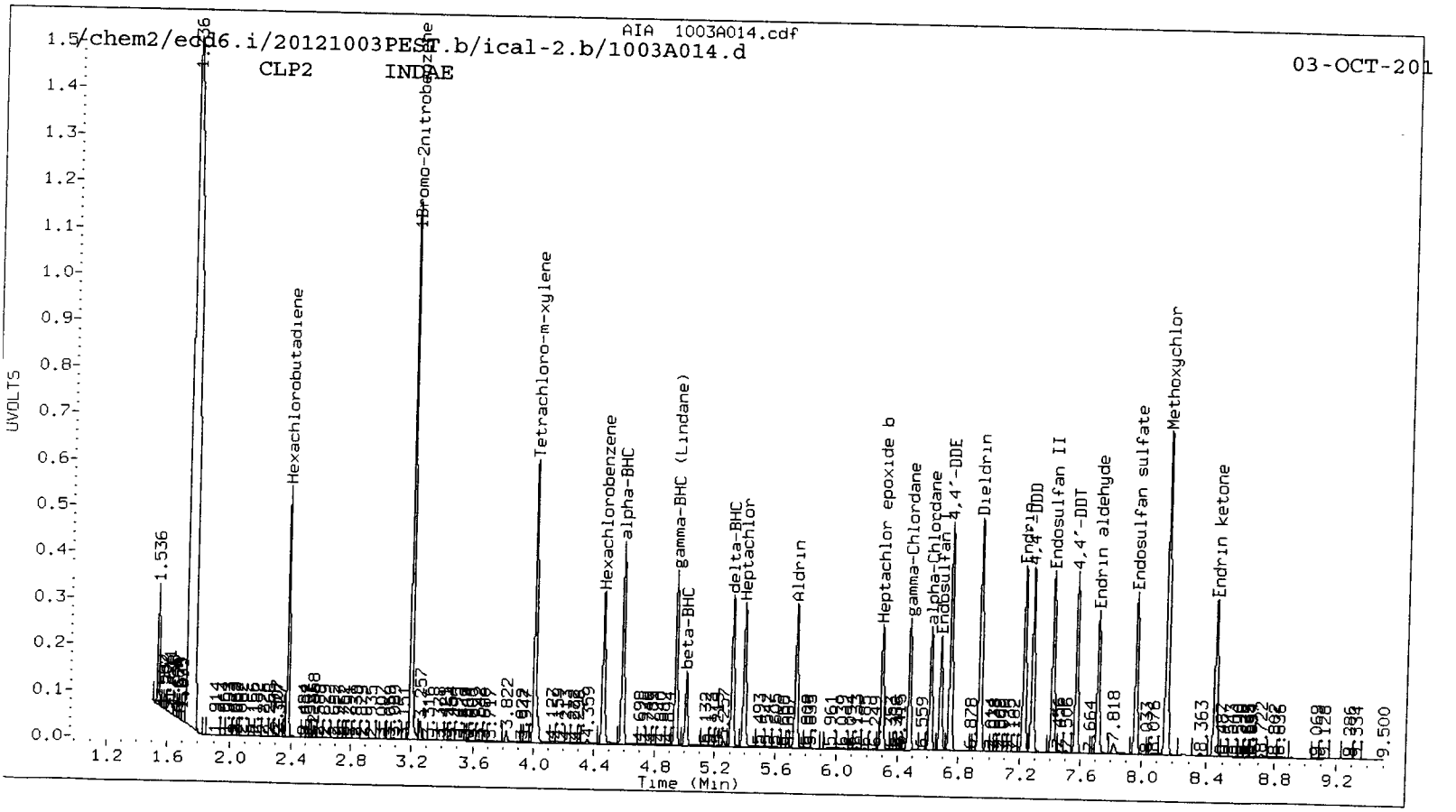
1003A014.cdf
STX-CLP INDAE
03-OCT-201
UVOLTS
Time (Min)
1.536
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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CLP2 INDAE
03-OCT-201
UVOLTS
Time (Min)
1.536
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A015.d ARI ID: INDAA
Data file 2: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A015.d Client ID:
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 03-OCT-2012 16:56
Compound Sublist: INDA Report Date: 10/04/2012 10:59
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.015	0.000	4049993	3.195	0.000	21107593	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.146	-0.001	93884	4.584	-0.002	562924	1.2439	1.2225	1.7	alpha-BHC
4.497	0.000	47557	5.006	0.000	260073	1.4906	1.3955	6.6	beta-BHC
4.663	0.000	76106	5.314	-0.001	440464	1.2509	1.2058	3.7	delta-BHC
4.424	0.000	89876	4.936	-0.001	530805	1.2961	1.2752	1.6	gamma-BHC (Lindane)
4.861	-0.001	86756	5.396	-0.001	522957	1.3799	1.3722	0.6	Heptachlor
5.148	-0.001	87853	5.734	-0.002	499986	1.3683	1.3342	2.5	Aldrin
5.723	-0.001	89298	6.292	-0.001	477430	1.4428	1.4132	2.1	Heptachlor epoxide b
6.099	0.000	82306	6.679	-0.001	418782	1.4370	1.3804	4.0	Endosulfan I
6.322	0.000	160686	6.938	-0.001	896482	2.7141	2.7934	2.9	Dieldrin
6.026	-0.001	145661	6.744	-0.002	857369	2.6647	2.8019	5.0	4,4'-DDE
6.541	0.000	138350	7.227	-0.001	729719	2.7114	2.8817	6.1	Endrin
6.746	0.000	138657	7.416	0.000	727966	2.8140	2.8760	2.2	Endosulfan II
6.583	-0.001	120429	7.282	-0.001	657884	2.7029	2.7509	1.8	4,4'-DDD
7.514	0.000	115041	7.959	-0.001	586419	2.7738	2.7553	0.7	Endosulfan sulfate
6.842	0.000	118090	7.571	0.000	617572	2.6360	2.7136	2.9	4,4'-DDT
7.271	0.000	325509	8.156	-0.003	1511810	14.8616	15.5702	4.7	Methoxychlor
7.767	0.000	142891	8.447	-0.001	617171	2.9462	2.9029	1.5	Endrin ketone
7.124	0.001	114936	7.715	0.000	577314	2.8924	2.8973	0.2	Endrin aldehyde
5.842	0.000	87280	6.475	-0.001	493222	1.4182	1.3995	1.3	gamma-Chlordane
5.966	-0.001	84983	6.613	-0.002	453148	1.4309	1.3790	3.7	alpha-Chlordane
2.209	-0.001	131702	2.376	-0.002	647910	1.4398	1.4138	1.8	Hexachlorobutadiene
4.002	-0.001	100639	4.457	-0.001	586197	1.5248	1.4794	3.0	Hexachlorobenzene
8.750	0.000	3734455	10.106	0.000	14677423	80.0000	80.0000	0.0	Hexabromobiphenyl
3.670	-0.001	170349	4.006	-0.001	1089161	2.8387	2.9688	4.5	Tetrachloro-m-xylene
8.610	0.000	162102	9.565	-0.001	707591	3.2480	3.1352	3.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	7.1	7.4	7.1~	115- 0
Decachlorobiphenyl	8.1	7.8	7.8~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

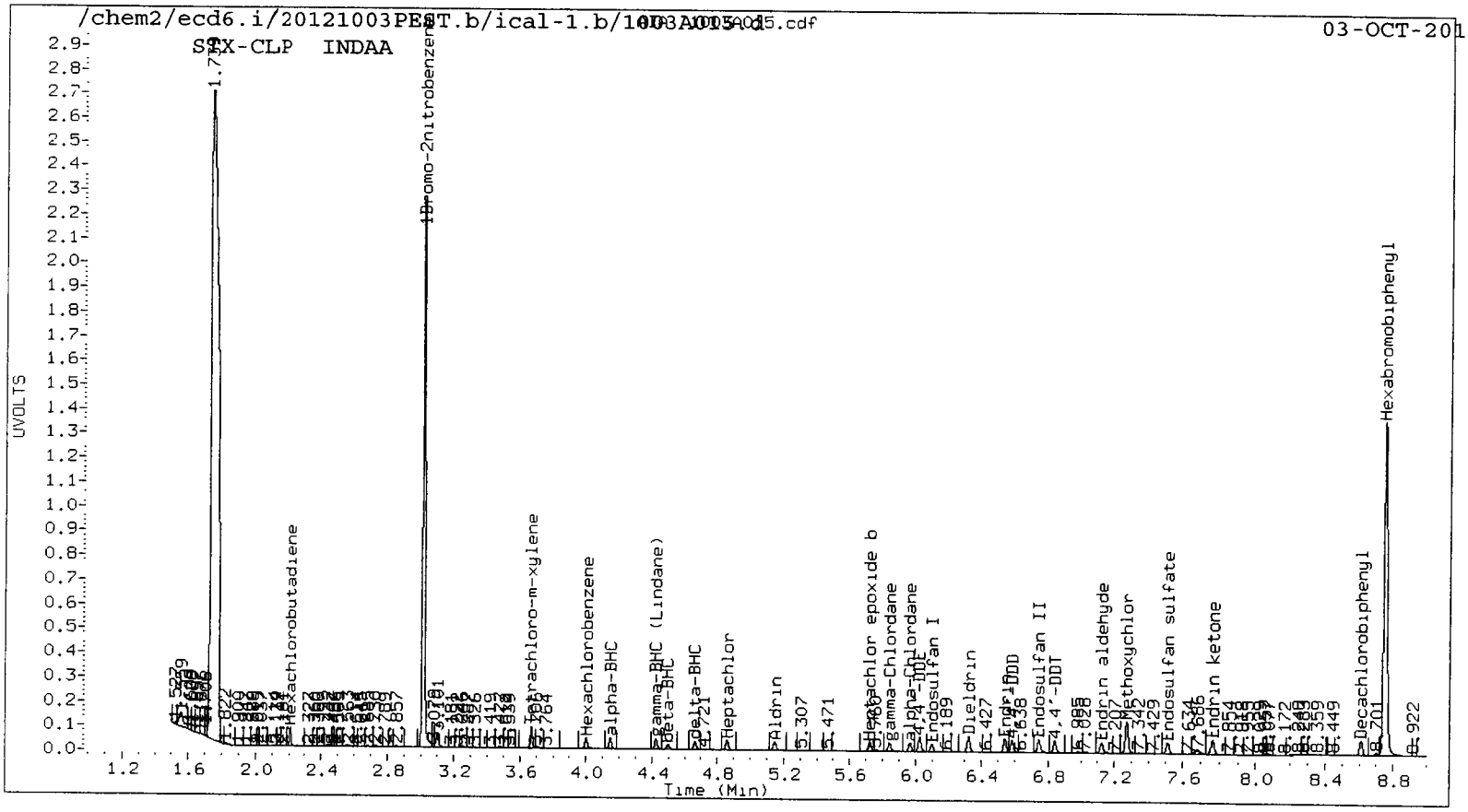
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4049993	-0.2
Hexabromobiphenyl	3748709	3734455	-0.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	21107593	0.4
Hexabromobiphenyl	14864285	14677423	-1.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	STX-CLP Col Peak#	RT Shift	Height	Amount	CLP2 Col Peak#	RT Shift	Height	Amount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03-OCT-201
SPX-CLP INDAA
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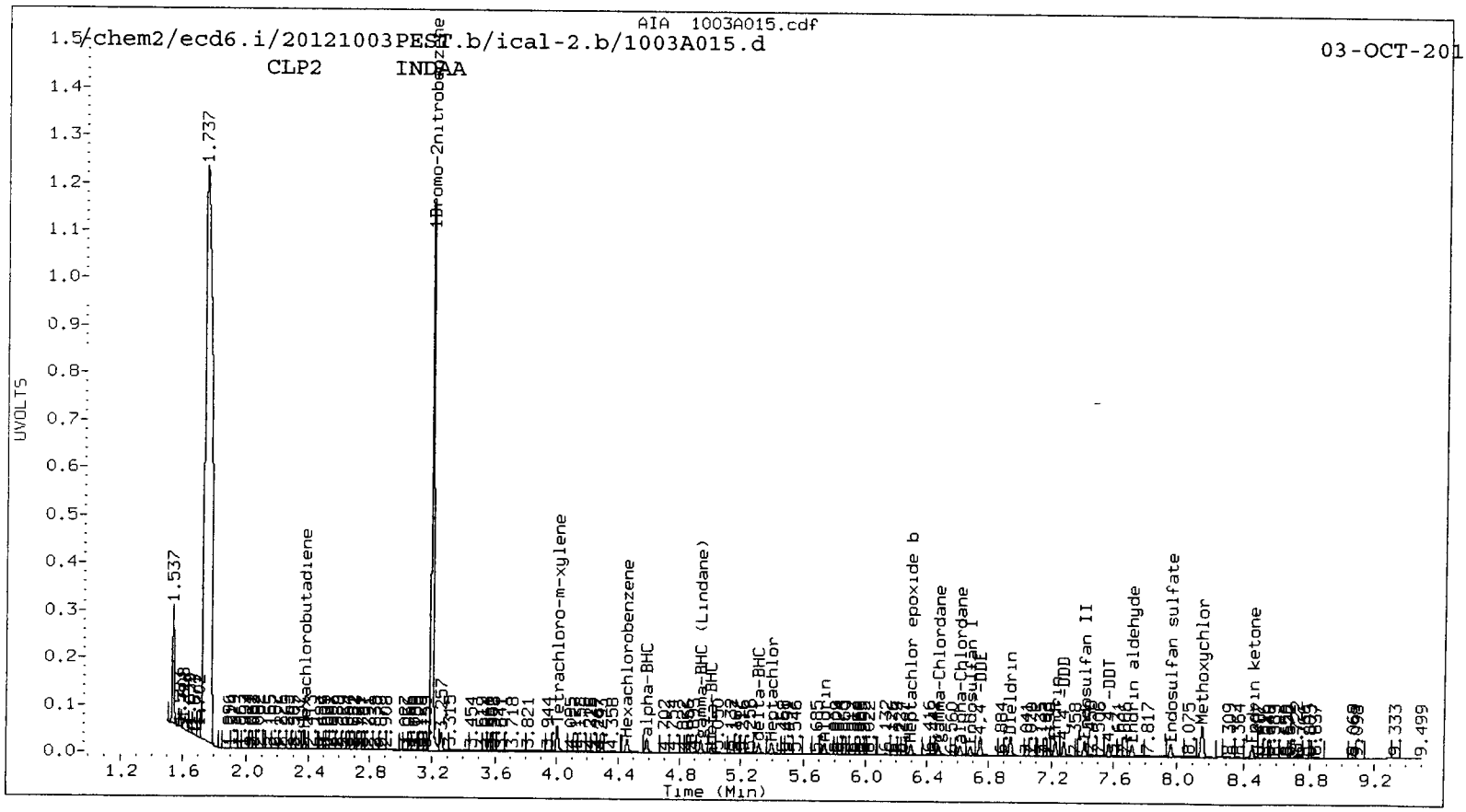
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
5.307
5.471
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
Dieldrin
4,4'-DDE
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl
UVOLTS
Time (Min)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03-OCT-201
CLP2 INDAA
1.737
1.537
1Bromo-2nitrobenzene
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
Dieldrin
4,4'-DDE
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
UVOLTS
Time (Min)

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A016.d ARI ID: INDAB
Data file 2: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A016.d Client ID:
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Compound Sublist: INDA
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: ar

Injection Date: 03-OCT-2012 17:14
Report Date: 10/04/2012 10:59
Matrix: NONE
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.015	0.000	4090558	3.195	0.000	21416427	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.147	0.000	186830	4.584	-0.001	1159721	2.4508	2.4823	1.3	alpha-BHC
4.497	0.000	88560	5.006	0.000	502406	2.7482	2.6569	3.4	beta-BHC
4.662	0.000	149622	5.313	-0.001	914469	2.4349	2.4674	1.3	delta-BHC
4.424	0.000	175589	4.936	-0.001	1073758	2.5071	2.5423	1.4	gamma-BHC (Lindane)
4.861	-0.001	165386	5.396	-0.002	1036329	2.6045	2.6800	2.9	Heptachlor
5.148	-0.001	167386	5.734	-0.001	1002480	2.5812	2.6364	2.1	Aldrin
5.722	-0.001	167624	6.292	-0.001	937162	2.6815	2.7340	1.9	Heptachlor epoxide b
6.099	0.000	155015	6.679	-0.001	832530	2.6797	2.7047	0.9	Endosulfan I
6.322	0.000	311998	6.937	-0.002	1791502	5.2176	5.5018	5.3	Dieldrin
6.026	-0.001	283514	6.744	-0.002	1712186	5.1351	5.5147	7.1	4,4'-DDE
6.540	0.000	268106	7.227	-0.001	1445065	5.2022	5.5693	6.8	Endrin
6.746	0.000	265666	7.415	-0.001	1431354	5.3382	5.5188	3.3	Endosulfan II
6.583	-0.001	233750	7.281	-0.002	1323868	5.1943	5.4024	3.9	4,4'-DDD
7.513	0.000	220973	7.959	-0.001	1168728	5.2752	5.3590	1.6	Endosulfan sulfate
6.841	-0.001	231047	7.570	-0.001	1231411	5.1063	5.2805	3.4	4,4'-DDT
7.270	0.000	617347	8.155	-0.003	2839505	27.9065	28.5399	2.2	Methoxychlor
7.767	0.000	262984	8.447	-0.002	1192839	5.3686	5.4755	2.0	Endrin ketone
7.123	0.000	217465	7.714	-0.001	1123507	5.4184	5.5026	1.5	Endrin aldehyde
5.842	0.000	163766	6.475	-0.001	958063	2.6347	2.6792	1.7	gamma-Chlordane
5.967	0.000	159239	6.613	-0.001	892745	2.6545	2.6777	0.9	alpha-Chlordane
2.210	0.000	248019	2.376	-0.001	1264510	2.6845	2.7195	1.3	Hexachlorobutadiene
4.001	-0.001	185775	4.458	0.000	1113449	2.7868	2.7695	0.6	Hexachlorobenzene
8.750	0.000	3771845	10.106	0.001	15039648	80.0000	80.0000	0.0	Hexabromobiphenyl
3.670	0.000	327208	4.007	-0.001	2119369	5.3984	5.6935	5.3	Tetrachloro-m-xylene
8.610	0.000	288613	9.565	-0.001	1317447	5.7255	5.6967	0.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	13.5	14.2	13.5~	115- 0
Decachlorobiphenyl	14.3	14.2	14.2~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

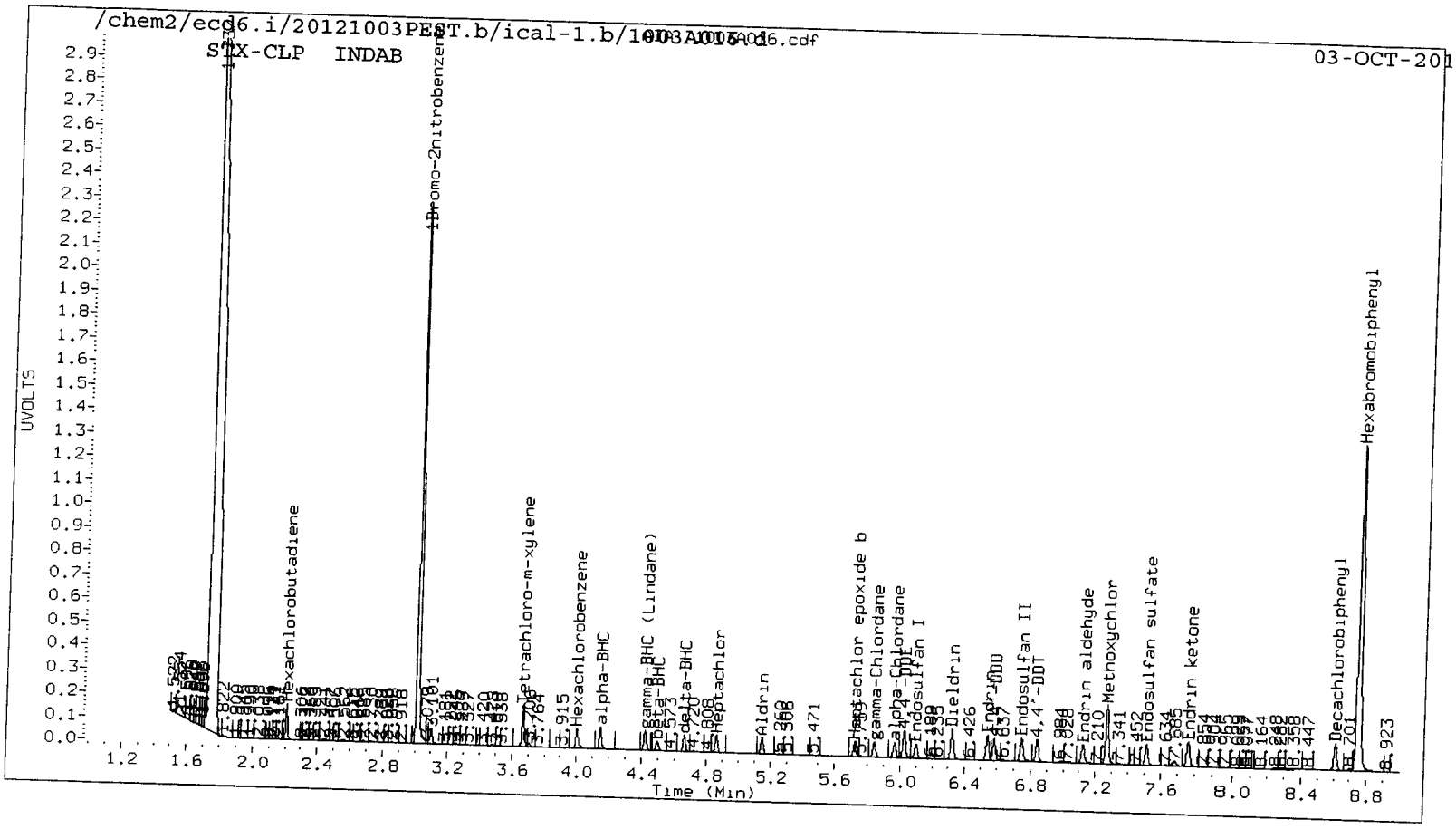
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4090558	0.8
Hexabromobiphenyl	3748709	3771845	0.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	21416427	1.8
Hexabromobiphenyl	14864285	15039648	1.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount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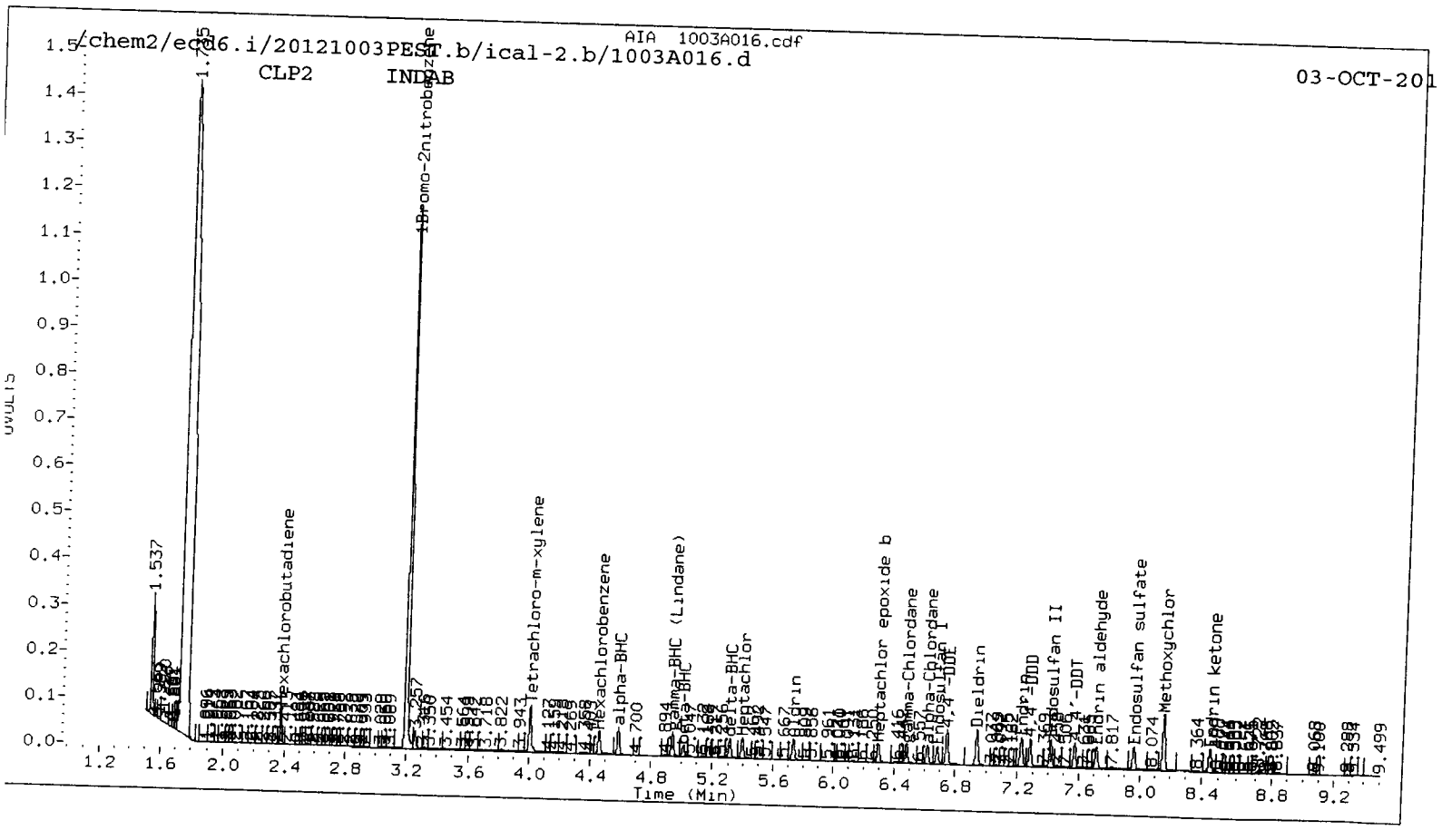
1003A016.cdf
STX-CLP INDAB
03-OCT-201
UVOLTS
Time (Min)
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
Dieldrin
Endrin
DDE
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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CLP2 INDAB
03-OCT-201
Time (Min)
1.537
1.735
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
DDE
Dieldrin
Endrin
DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A017.d ARI ID: INDAC
Data file 2: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A017.d Client ID:
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 03-OCT-2012 17:32
Compound Sublist: INDA Report Date: 10/04/2012 10:59
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.015	0.000	4021073	3.195	0.000	21029129	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.146	-0.001	375418	4.584	-0.002	2371492	5.0098	5.1694	3.1	alpha-BHC
4.497	0.000	165087	5.006	-0.001	985656	5.2116	5.3086	1.8	beta-BHC
4.662	0.000	296217	5.313	-0.001	1853943	4.9039	5.0944	3.8	delta-BHC
4.424	0.000	345955	4.936	-0.001	2152238	5.0250	5.1896	3.2	gamma-BHC (Lindane)
4.861	-0.001	317990	5.396	-0.001	2038451	5.0942	5.3686	5.2	Heptachlor
5.147	-0.001	324084	5.734	-0.002	1987702	5.0839	5.3237	4.6	Aldrin
5.722	-0.001	317055	6.292	-0.001	1812761	5.1596	5.3859	4.3	Heptachlor epoxide b
6.098	-0.001	293283	6.679	-0.001	1621321	5.1574	5.3643	3.9	Endosulfan I
6.322	-0.001	610639	6.937	-0.002	3499950	10.3884	10.9464	5.2	Dieldrin
6.026	-0.001	557488	6.744	-0.002	3357060	10.2720	11.0117	7.0	4,4'-DDE
6.539	-0.001	522854	7.227	-0.001	2803750	10.2748	10.8226	5.2	Endrin
6.745	-0.001	510105	7.415	-0.001	2788388	10.3807	10.7679	3.7	Endosulfan II
6.583	-0.001	453913	7.281	-0.002	2613050	10.2155	10.6800	4.4	4,4'-DDD
7.513	0.000	422893	7.959	-0.001	2284803	10.2244	10.4930	2.6	Endosulfan sulfate
6.841	-0.002	452523	7.570	-0.001	2440748	10.1287	10.4828	3.4	4,4'-DDT
7.270	-0.001	1146231	8.155	-0.003	5186781	52.4757	52.2142	0.5	Methoxychlor
7.766	-0.001	493774	8.447	-0.001	2276202	10.2086	10.4649	2.5	Endrin ketone
7.123	0.000	410006	7.714	-0.001	2163872	10.3462	10.6146	2.6	Endrin aldehyde
5.842	-0.001	310794	6.474	-0.002	1853134	5.0865	5.2777	3.7	gamma-Chlordane
5.966	-0.001	301572	6.613	-0.002	1736249	5.1141	5.3035	3.6	alpha-Chlordane
2.209	-0.001	472580	2.376	-0.001	2441459	5.2036	5.3474	2.7	Hexachlorobutadiene
4.001	-0.001	344216	4.457	0.000	2117430	5.2528	5.3637	2.1	Hexachlorobenzene
8.750	0.000	3724289	10.106	0.001	15016060	80.0000	80.0000	0.0	Hexabromobiphenyl
3.669	-0.001	626204	4.006	-0.001	4036246	10.5100	11.0428	4.9	Tetrachloro-m-xylene
8.610	-0.001	523224	9.566	0.000	2426746	10.5122	10.5098	0.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	26.3	27.6	26.3~	115- 0
Decachlorobiphenyl	26.3	26.3	26.3~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

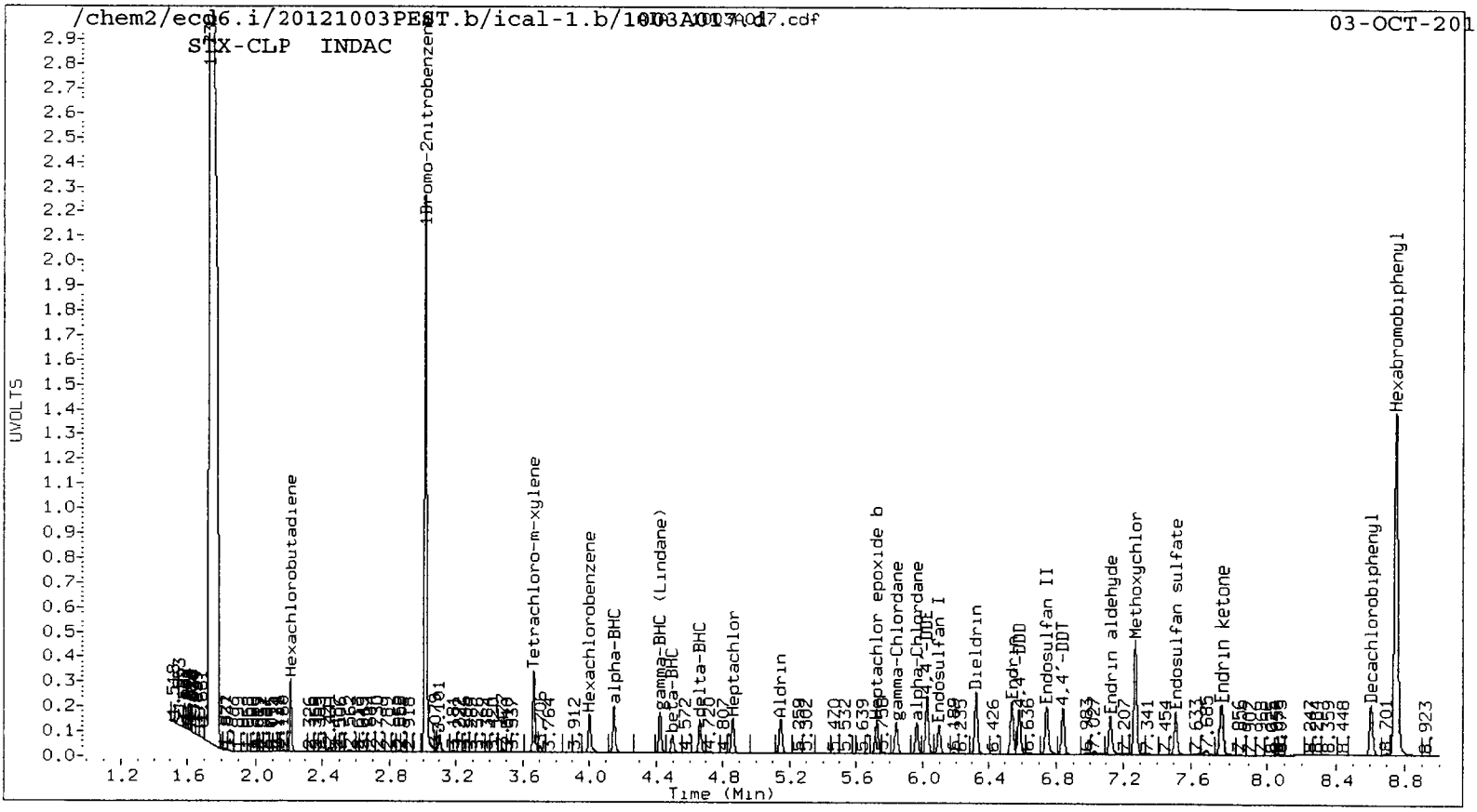
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4021073	-1.0
Hexabromobiphenyl	3748709	3724289	-0.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	21029129	0.0
Hexabromobiphenyl	14864285	15016060	1.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Aroclor	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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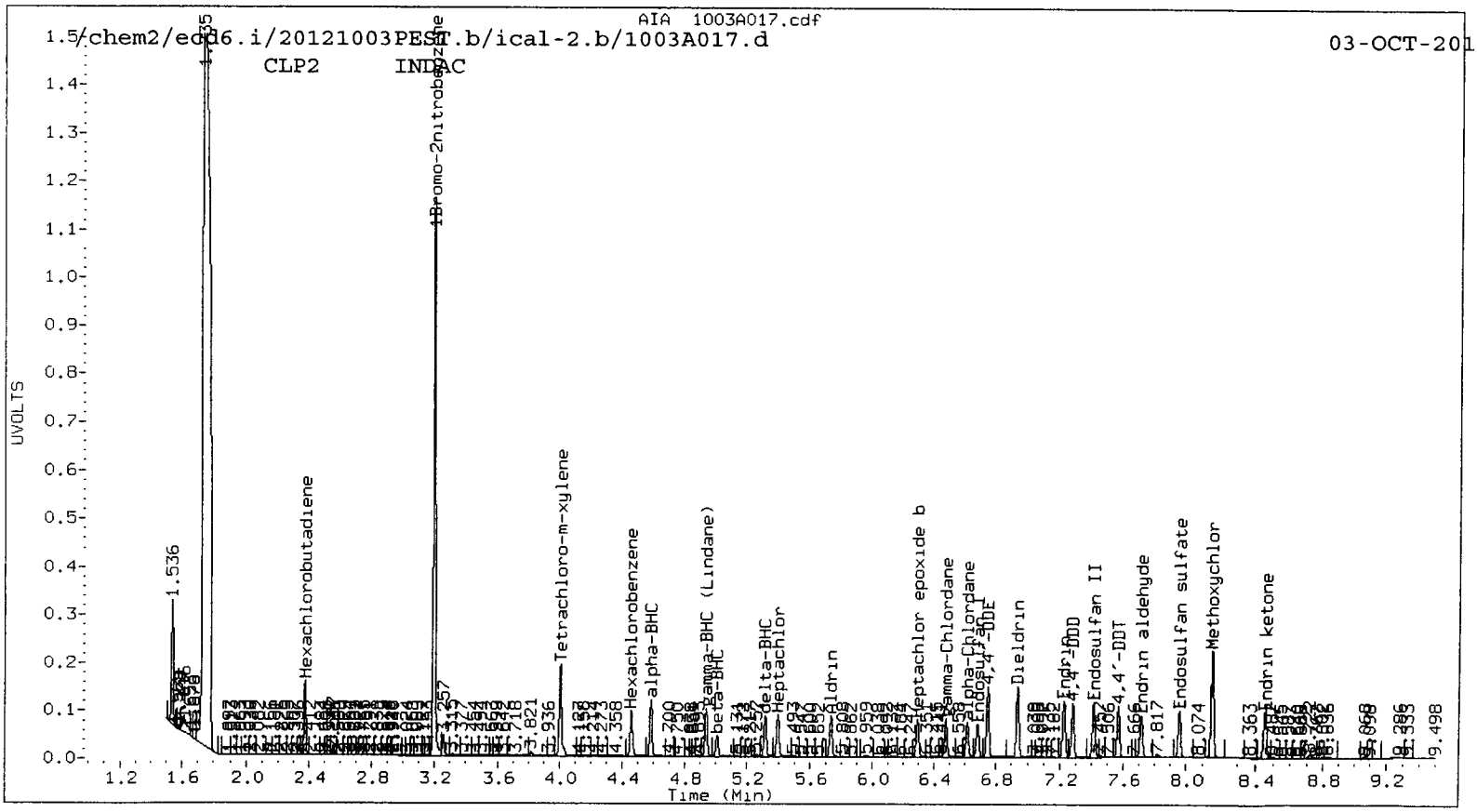
1003A017.cdf
03-OCT-201
SIX-CLP INDAC
UVOLTS
Time (Min)
1.536
Hexachlorobutadiene
1.761
1-Bromo-2nitrobenzene
3.701
Tetrachloro-m-xylene
3.912
Hexachlorobenzene
4.356
alpha-BHC
4.700
gamma-BHC (Lindane)
4.572
beta-BHC
4.798
delta-BHC
4.802
Heptachlor
5.360
Aldrin
5.420
5.532
5.639
5.798
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Endosulfan I
6.295
Dieldrin
6.426
Endrin
6.638
4,4'-DDD
Endosulfan II
4,4'-DDT
6.983
7.207
Endrin aldehyde
Methoxychlor
7.341
7.454
Endosulfan sulfate
7.633
7.685
Endrin ketone
7.856
7.907
8.201
Decachlorobiphenyl
8.247
8.359
8.448
Hexabromobiphenyl
8.923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AIA 1003A017.cdf
03-OCT-201
CLP2 INDAC
UVOLTS
Time (Min)
1.535
1.536
Hexachlorobutadiene
1.757
1-Bromo-2nitrobenzene
3.821
3.936
Tetrachloro-m-xylene
4.358
Hexachlorobenzene
alpha-BHC
4.700
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
5.360
Aldrin
5.798
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Endosulfan I
6.295
Dieldrin
6.638
Endrin
4,4'-DDD
7.207
Endosulfan II
4,4'-DDT
7.666
Endrin aldehyde
7.817
Endosulfan sulfate
8.074
Methoxychlor
8.363
Endrin ketone
9.498

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A018.d ARI ID: INDAD
Data file 2: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A018.d Client ID:
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 03-OCT-2012 17:50
Compound Sublist: INDA Report Date: 10/04/2012 10:59
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.015	0.000	4048036	3.195	0.000	21297295	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.147	-0.001	753043	4.585	-0.001	4731242	9.9821	10.1834	2.0	alpha-BHC
4.497	-0.001	307333	5.007	0.000	1865344	9.6375	9.9199	2.9	beta-BHC
4.663	0.000	601026	5.314	-0.001	3683804	9.8837	9.9952	1.1	delta-BHC
4.424	0.000	686414	4.936	0.000	4256403	9.9037	10.1341	2.3	gamma-BHC (Lindane)
4.861	-0.001	619072	5.397	0.000	3945231	9.8515	10.2595	4.1	Heptachlor
5.148	-0.001	632975	5.735	-0.001	3894113	9.8634	10.2984	4.3	Aldrin
5.722	-0.001	606961	6.293	0.000	3472997	9.8117	10.1886	3.8	Heptachlor epoxide b
6.099	0.000	562379	6.679	-0.001	3122784	9.8237	10.2019	3.8	Endosulfan I
6.322	0.000	1186002	6.938	-0.001	6677897	20.0422	20.6228	2.9	Dieldrin
6.027	-0.001	1096331	6.744	-0.001	6393429	20.0658	20.7074	3.1	4,4'-DDE
6.540	0.000	1028622	7.228	0.000	5354567	19.9045	20.4200	2.6	Endrin
6.745	-0.001	985564	7.416	0.000	5310240	19.7496	20.2597	2.6	Endosulfan II
6.583	-0.001	895847	7.282	-0.001	5068029	19.8529	20.4646	3.0	4,4'-DDD
7.514	0.000	830963	7.959	-0.001	4475850	19.7831	20.3080	2.6	Endosulfan sulfate
6.841	-0.001	898651	7.571	0.000	4783044	19.8066	20.2954	2.4	4,4'-DDT
7.271	0.000	2153053	8.156	-0.003	9446850	97.0609	93.9546	3.3	Methoxychlor
7.767	0.000	953680	8.448	-0.001	4379362	19.4154	19.8918	2.4	Endrin ketone
7.124	0.000	789175	7.715	0.000	4155941	19.6096	20.1410	2.7	Endrin aldehyde
5.842	0.000	600154	6.475	-0.001	3566810	9.7568	10.0304	2.8	gamma-Chlordane
5.966	-0.001	579953	6.614	-0.001	3344571	9.7694	10.0876	3.2	alpha-Chlordane
2.210	0.000	892276	2.376	-0.001	4593851	9.7594	9.9350	1.8	Hexachlorobutadiene
4.001	-0.001	639325	4.458	0.000	3975246	9.6912	9.9430	2.6	Hexachlorobenzene
8.750	0.000	3782157	10.107	0.001	15199043	80.0000	80.0000	0.0	Hexabromobiphenyl
3.670	-0.001	1187501	4.007	-0.001	7484963	19.7978	20.2203	2.1	Tetrachloro-m-xylene
8.611	0.000	964936	9.566	0.000	4522605	19.0901	19.3509	1.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	49.5	50.6	49.5~	115- 0
Decachlorobiphenyl	47.7	48.4	47.7~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

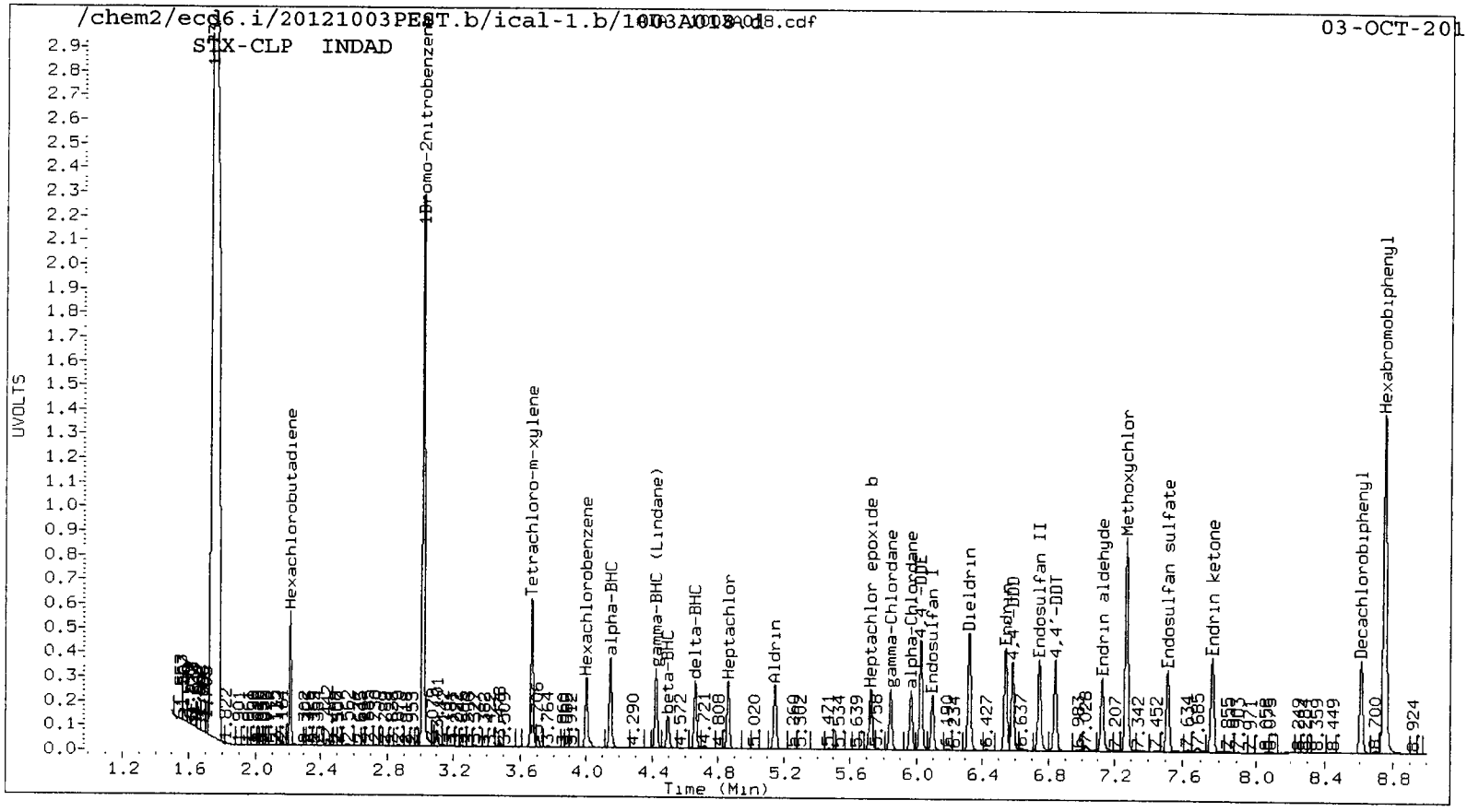
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4048036	-0.3
Hexabromobiphenyl	3748709	3782157	0.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	21297295	1.3
Hexabromobiphenyl	14864285	15199043	2.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount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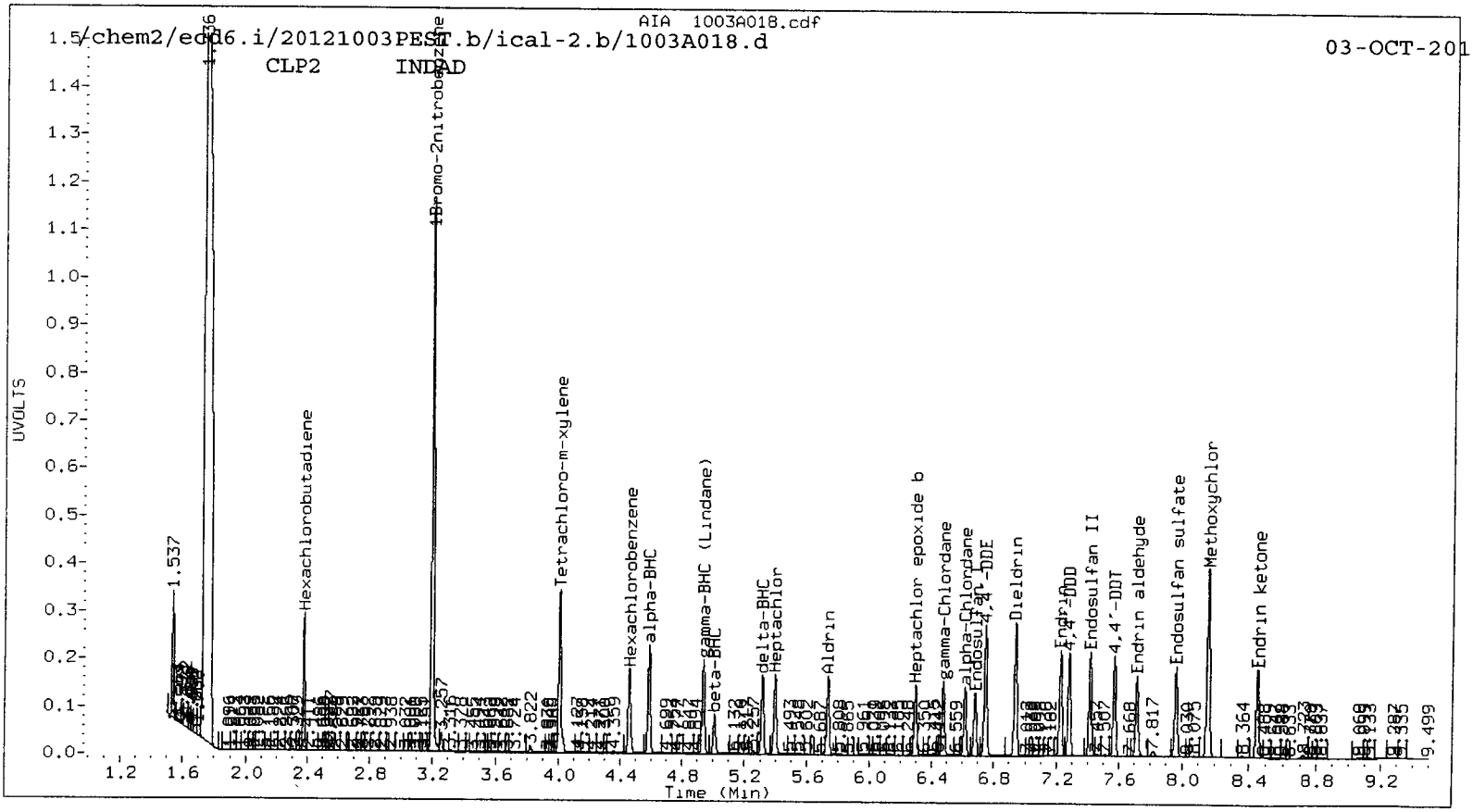
1003A018.cdf
03-OCT-201
STX-CLP INDAD
UVOLTS
Time (Min)
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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AIA 1003A018.cdf
03-OCT-201
CLP2 INDAD
UVOLTS
Time (Min)
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A019.d ARI ID: INDAF
Data file 2: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A019.d Client ID:
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m
Compound Sublist: INDA
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: ar

Injection Date: 03-OCT-2012 18:08
Report Date: 10/04/2012 10:59
Matrix: NONE
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.015	0.000	4083237	3.195	0.000	21266311	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.147	-0.001	3043309	4.584	-0.001	18332619	39.9932	39.5161	1.2	alpha-BHC
4.497	-0.001	1148351	5.006	-0.001	6937835	35.7002	36.9493	3.4	beta-BHC
4.662	0.000	2482953	5.314	-0.001	14827162	40.4795	40.2888	0.5	delta-BHC
4.424	0.000	2742105	4.936	0.000	16284513	39.2225	38.8286	1.0	gamma-BHC (Lindane)
4.861	-0.001	2392248	5.396	-0.001	13998475	37.7405	36.4559	3.5	Heptachlor
5.148	-0.001	2459585	5.735	0.000	14079333	37.9963	37.2886	1.9	Aldrin
5.722	-0.001	2276278	6.292	-0.001	12162441	36.4794	35.7326	2.1	Heptachlor epoxide
6.098	-0.001	2112972	6.679	-0.001	11126423	36.5913	36.4023	0.5	Endosulfan I
6.322	-0.001	4466945	6.937	-0.002	22775652	74.8361	70.4386	6.1	Dieldrin
6.026	-0.001	4195148	6.744	-0.002	21607101	76.1207	70.0844	8.3	4,4'-DDE
6.539	-0.001	3902111	7.227	-0.001	18268145	74.6489	68.7251	8.3	Endrin
6.745	-0.001	3685750	7.416	-0.001	18535218	73.0175	69.7600	4.6	Endosulfan II
6.583	-0.001	3437840	7.282	-0.001	18004957	75.3189	71.7209	4.9	4,4'-DDD
7.513	-0.001	3161471	7.959	-0.001	16231153	74.4097	72.6492	2.4	Endosulfan sulfate
6.841	-0.001	3535041	7.570	-0.001	17615590	77.0267	73.7363	4.4	4,4'-DDT
7.270	-0.001	7835237	8.156	-0.003	31786309	349.1966	311.8609	11.3	Methoxychlor
7.766	0.000	3602102	8.447	-0.002	15829007	72.4983	70.9261	2.2	Endrin ketone
7.123	-0.001	2930013	7.714	-0.001	14712763	71.9769	70.3388	2.3	Endrin aldehyde
5.842	-0.001	2311547	6.475	-0.001	13020726	37.2551	36.6695	1.6	gamma-Chlordane
5.966	-0.001	2215001	6.613	-0.002	12197419	36.9902	36.8425	0.4	alpha-Chlordane
2.210	0.000	3353279	2.377	0.000	16533462	36.3607	35.8087	1.5	Hexachlorobutadiene
4.001	-0.001	2311938	4.457	0.000	14013718	34.7434	35.1025	1.0	Hexachlorobenzene
8.750	0.000	3825703	10.106	0.000	15407292	80.0000	80.0000	0.0	Hexabromobiphenyl
3.670	0.000	4370852	4.007	-0.001	24864526	72.2419	67.2684	7.1	Tetrachloro-m-xylen
8.610	-0.001	3423358	9.565	-0.001	16108381	66.9562	67.9913	1.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	180.6	168.2	168.2~	115- 0
Decachlorobiphenyl	167.4	170.0	167.4~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

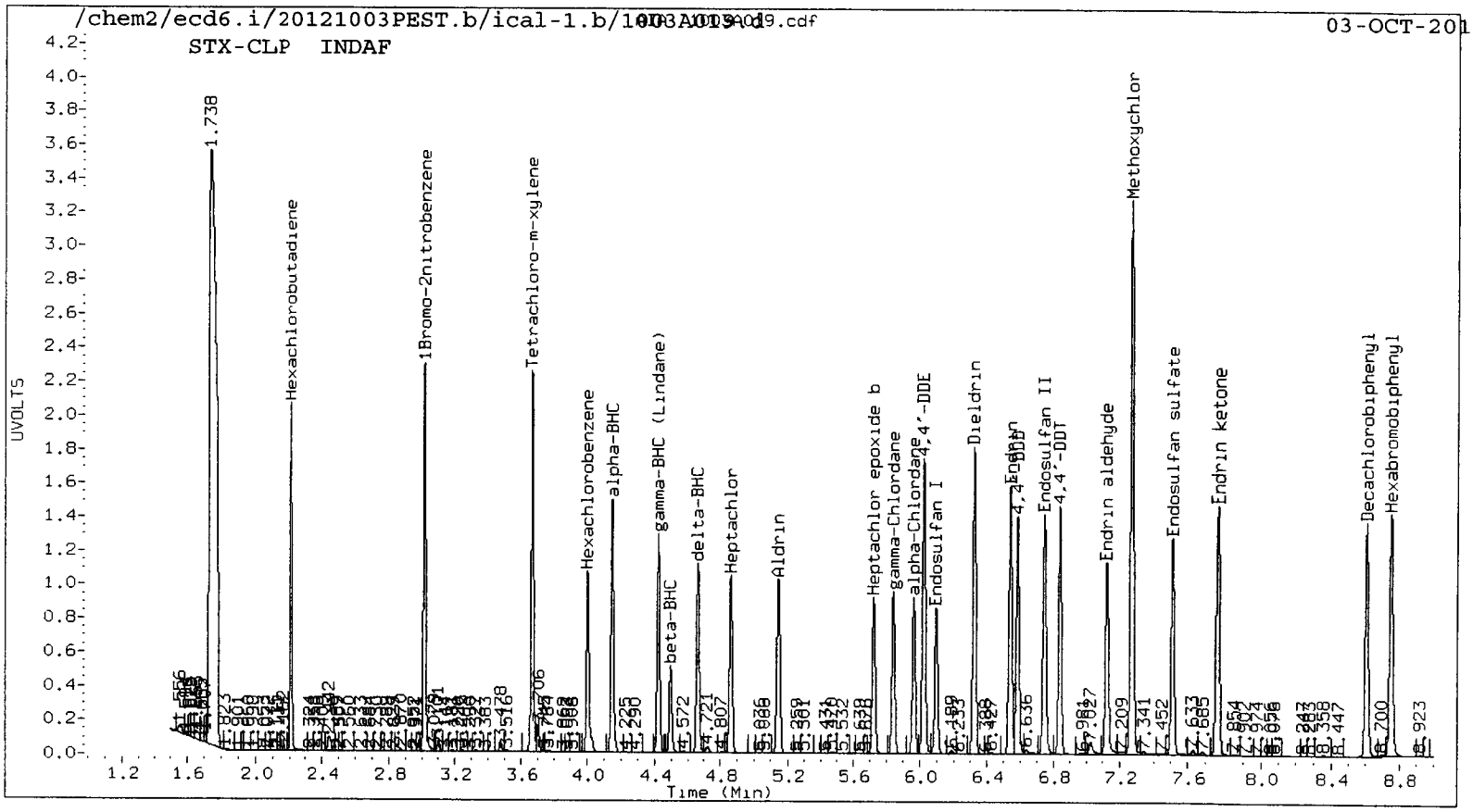
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4083237	0.6
Hexabromobiphenyl	3748709	3825703	2.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	21266311	1.1
Hexabromobiphenyl	14864285	15407292	3.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount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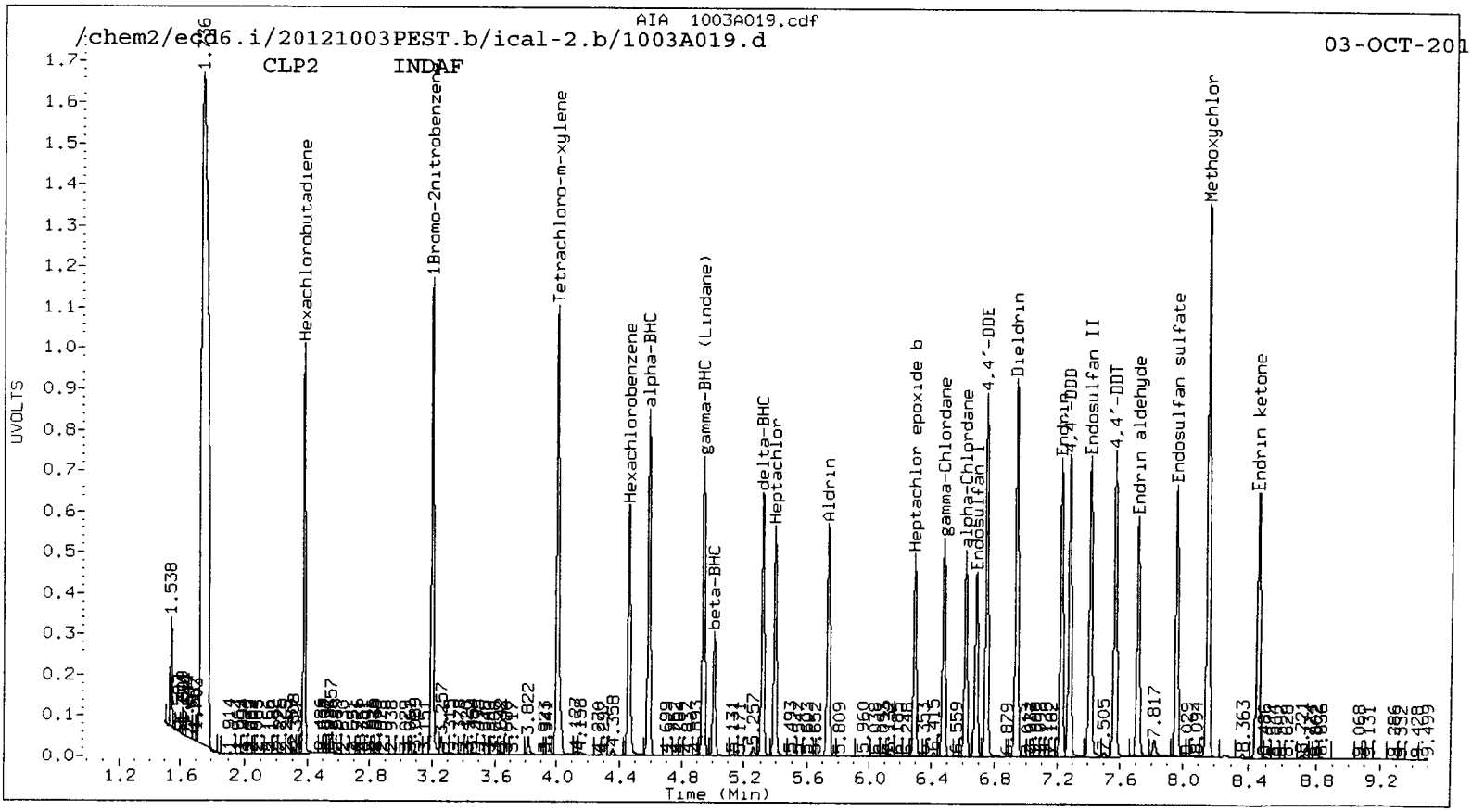
03-OCT-201
STX-CLP INDAF
UVOLTS
Time (Min)
1.738
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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/chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A019.d
03-OCT-201
CLP2 INDAF
UVOLTS
Time (Min)
1.538
1.736
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121003PEST.b/ical-1.b/1003A020.d ARI ID: INDAG
Data file 2: /chem2/ecd6.i/20121003PEST.b/ical-2.b/1003A020.d Client ID:
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 03-OCT-2012 18:26
Compound Sublist: INDA Report Date: 10/04/2012 10:59
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.015	0.000	4094375	3.195	0.000	21395806	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.147	0.000	6223208	4.585	0.000	36585525	81.5589	78.3830	4.0	alpha-BHC
4.497	0.000	2279688	5.007	0.000	13424435	70.6786	71.0627	0.5	beta-BHC
4.663	0.000	5108787	5.314	0.000	29685366	83.0618	80.1738	3.5	delta-BHC
4.424	0.000	5579992	4.937	0.000	31900211	79.5978	75.6021	5.1	gamma-BHC (Lindane)
4.862	0.000	4765732	5.397	0.000	25938815	74.9804	67.1430	11.0	Heptachlor
5.149	0.000	4904752	5.736	0.000	26129016	75.5637	68.7830	9.4	Aldrin
5.723	0.000	4456552	6.293	0.000	22445619	71.2260	65.5449	8.3	Heptachlor epoxide
6.099	0.000	4158031	6.680	0.000	20631522	71.8106	67.0916	6.8	Endosulfan I
6.322	0.000	8804565	6.939	0.000	42534449	147.1044	130.7507	11.8	Dieldrin
6.027	0.000	8316867	6.745	0.000	39831881	150.4984	128.4161	15.8	4,4'-DDE
6.540	0.000	7740338	7.228	0.000	34059169	149.6120	129.3858	14.5	Endrin
6.746	0.000	7233710	7.416	0.000	34895917	144.7922	132.6219	8.8	Endosulfan II
6.584	0.000	6824279	7.283	0.000	34056690	151.0629	136.9897	9.8	4,4'-DDD
7.514	0.000	6260618	7.960	0.000	31062282	148.8814	140.3934	5.9	Endosulfan sulfate
6.842	0.000	7063105	7.571	0.000	33916089	155.4983	143.3578	8.1	4,4'-DDT
7.271	0.000	15696181	8.158	0.000	57718760	706.7971	571.8336	21.1	Methoxychlor
7.766	0.000	7227390	8.449	0.000	30883210	146.9726	139.7356	5.0	Endrin ketone
7.123	0.000	5778071	7.715	0.000	27776354	143.4133	134.0935	6.7	Endrin aldehyde
5.842	0.000	4640873	6.476	0.000	24653279	74.5932	69.0094	7.8	gamma-Chlordane
5.967	0.000	4412614	6.615	0.000	23124370	73.4896	69.4248	5.7	alpha-Chlordane
2.210	0.000	6701087	2.377	0.000	32243507	72.4645	69.4113	4.3	Hexachlorobutadiene
4.002	0.000	4586041	4.458	0.000	26556350	68.7307	66.1175	3.9	Hexachlorobenzene
8.750	0.000	3786416	10.107	0.001	15257890	80.0000	80.0000	0.0	Hexabromobiphenyl
3.670	0.000	8627475	4.008	0.000	46807054	142.2079	125.8652	12.2	Tetrachloro-m-xyle
8.610	0.000	6651608	9.566	0.000	31112739	131.4463	132.6085	0.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	355.5	314.7	314.7~	115- 0
Decachlorobiphenyl	328.6	331.5	328.6~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

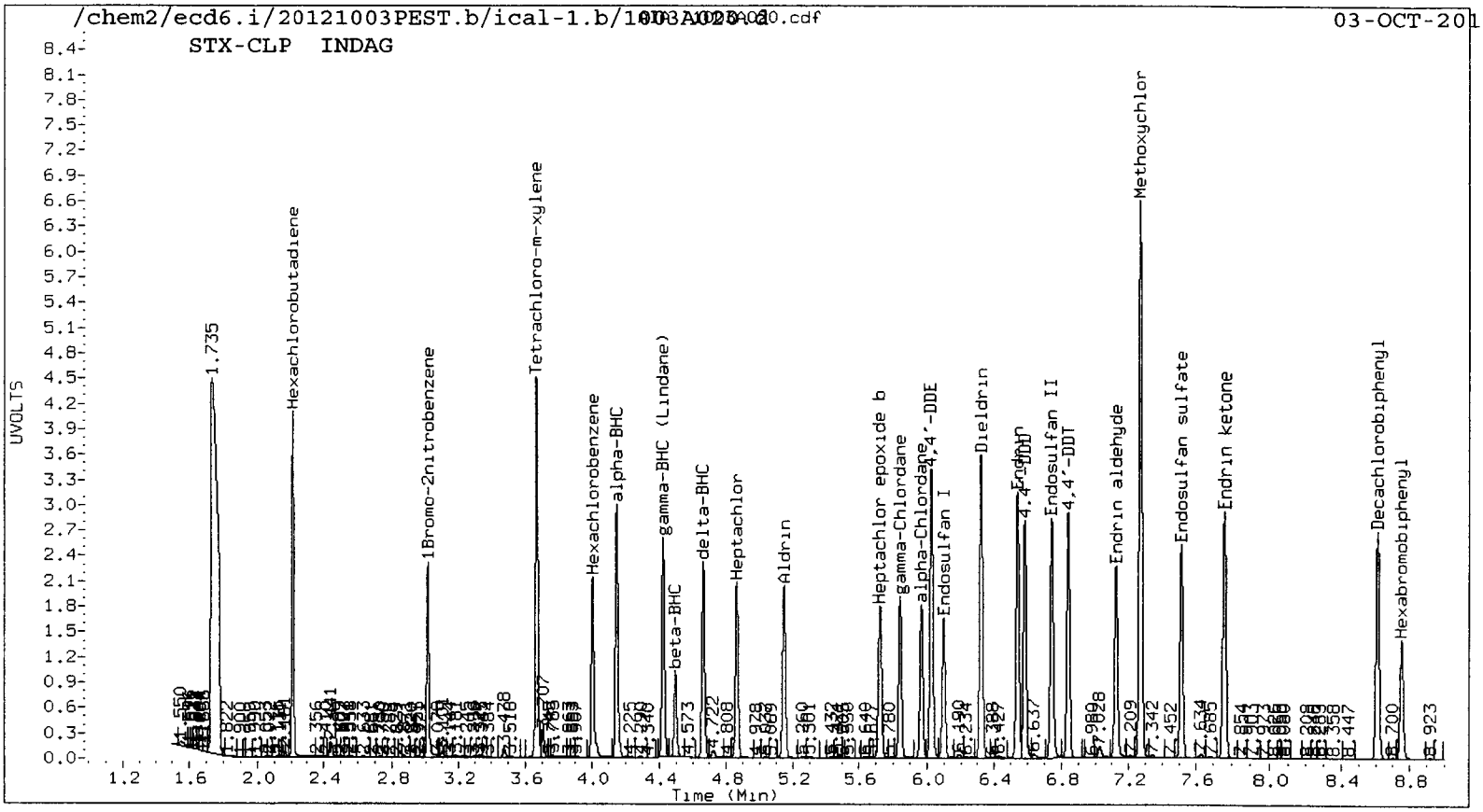
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4094375	0.8
Hexabromobiphenyl	3748709	3786416	1.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	21395806	1.7
Hexabromobiphenyl	14864285	15257890	2.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	STX-CLP Col Peak#	RT Shift	Height	Amount	CLP2 Col Peak#	RT Shift	Height	Amount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03-OCT-201
STX-CLP INDAG
UVOLTS
Time (Min)
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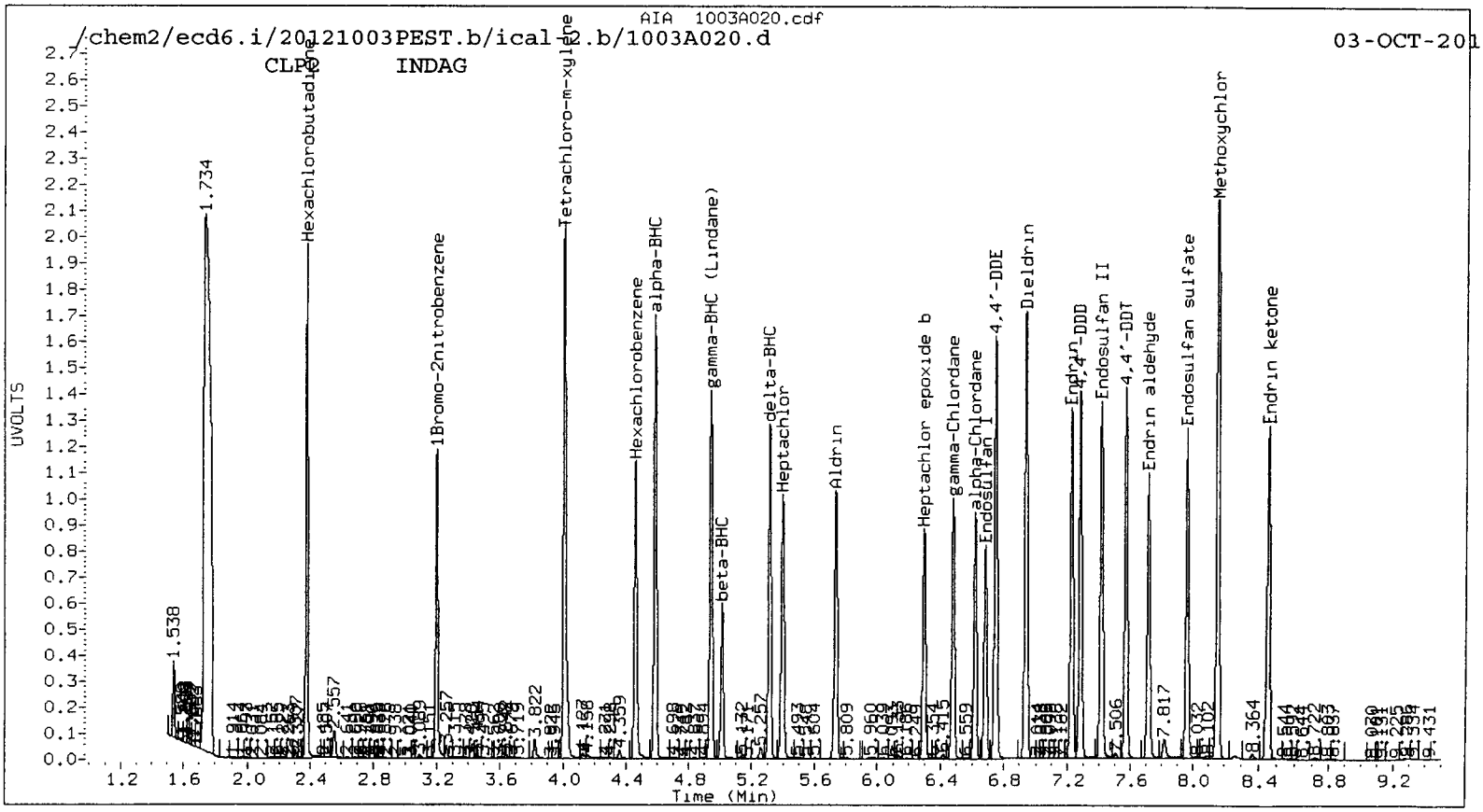
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Endosulfan I
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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03-OCT-201
CLP2 INDAG
UVOLTS
Time (Min)
1.538
1.734
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Endosulfan I
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone

Pesticide Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: VR80

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: KRO Client ID: Anchor QEA

ARI SOP: **403S**(PCB) **405S**(Herb) **407S**(TPH-D) **409S**(HCID) **412S**(PCP) **423S**(Pest)
427S(Dir Inj) **428S**(EPH) **432S**(EDB) **Other**

Parameter(s): Pest

Instrument: FID-3A FID-3B FID-4A FID-4B FID-5 FID-7 FID-8
FID-9 ECD-1 ECD-5 ECD-6 ECD-7

Dates: Curve: 10/3/12 Analysis Start: 11/20/12

Endrin/DDT Breakdown <15%? YES / NO / NA	Method Blank In Control? YES / NO
ICal Meets RF & %RSD Criteria? YES / NO	LCS/LCSD Recovery In Control? YES / NO
CCal Meets RF & %RSD Criteria? YES / NO	Surrogate Recovery In Control? YES / NO
Manual Integrations for ICal? YES / NO	Manual Integrations for Samples? YES / NO
Internal Standard Meets Criteria? YES / NO / NA	Special Analysis Criteria Met? YES / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

Additional Details on Reverse: Yes / No

Analyst: YZ **Date:** 11/20/12

Reviewer: MW **Date:** 11/21

Analytical Resources Inc.: Organics Instrument Log

ECD6 Serial No.: US00007128

Date: 11/20/12 Analysis: ~~VB~~ Pest Analyst: YZ

Column 1 Serial No.: 1085684 Column Type: STX ccp,

Column 2 Serial No.: 1094709 Column Type: STX ccp2

GC Method: Pest ICal Date:

IS	Ical/Ccal	ICV
2006-1	1985-3	
	1982-1,2,3	
	1984-3	

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd6.i/20121003PEST.b/1120-1.b

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1	20-NOV-2012 11:58	1120A002.d	1	DS	
2	20-NOV-2012 12:16	1120A003.d	1	INDAE	
3	20-NOV-2012 12:34	1120A004.d	1	WNDE	
4	20-NOV-2012 12:52	1120A005.d	1	TOXAPH	
5	20-NOV-2012 13:10	1120A006.d	1	DS	
6	20-NOV-2012 13:27	1120A007.d	1	INDAE	
7	20-NOV-2012 13:45	1120A008.d	1	VR88MBW1	
8	20-NOV-2012 14:03	1120A009.d	1	VR88LCSW1	
9	20-NOV-2012 14:21	1120A010.d	1	VR88LCSDW1	
10	20-NOV-2012 14:39	1120A011.d	1	VR88A	
11	20-NOV-2012 14:56	1120A012.d	1	VR88B	
12	20-NOV-2012 15:14	1120A013.d	1	VR88C	
13	20-NOV-2012 15:32	1120A014.d	1	VR88D	
14	20-NOV-2012 15:50	1120A015.d	1	VR88E	
15	20-NOV-2012 16:08	1120A016.d	1	VS14A	
16	20-NOV-2012 16:25	1120A017.d	1	VS14B	
17	20-NOV-2012 16:43	1120A018.d	1	VS14C	
18	20-NOV-2012 17:01	1120A019.d	1	VS14D	
19	20-NOV-2012 17:19	1120A020.d	1	VS14E	
20	20-NOV-2012 17:37	1120A021.d	1	DS	
21	20-NOV-2012 17:54	1120A022.d	1	INDAE	
22	20-NOV-2012 18:12	1120A023.d	1	VR80MBW1	
23	20-NOV-2012 18:30	1120A024.d	1	VR80LCSW1	
24	20-NOV-2012 18:48	1120A025.d	1	VR80LCSDW1	
25	20-NOV-2012 19:06	1120A026.d	1	VR80A	
26	20-NOV-2012 19:23	1120A027.d	1	VR80B	
27	20-NOV-2012 19:41	1120A028.d	1	VR80C	
28	20-NOV-2012 19:59	1120A029.d	1	VR80D	
29	20-NOV-2012 20:17	1120A030.d	1	DS	
30	20-NOV-2012 20:34	1120A031.d	1	INDAE	
31	20-NOV-2012 20:52	1120A032.d	1	TOXAPH	
32	20-NOV-2012 21:10	1120A033.d	1	VS45MBW1	
33	20-NOV-2012 21:28	1120A034.d	1	VS45LCSW1	
34	20-NOV-2012 21:46	1120A035.d	1	VS45LCSDW1	
35	20-NOV-2012 22:03	1120A036.d	1	VS45A	
36	20-NOV-2012 22:21	1120A037.d	1	VS45B	
37	20-NOV-2012 22:39	1120A038.d	1	VS45C	
38	20-NOV-2012 22:57	1120A039.d	1	VS45D	
39	20-NOV-2012 23:15	1120A040.d	1	VS45E	
40	20-NOV-2012 23:32	1120A041.d	1	VS45F	
41	20-NOV-2012 23:50	1120A042.d	1	VS49A	
42	21-NOV-2012 00:08	1120A043.d	1	VS49B	
43	21-NOV-2012 00:26	1120A044.d	1	VS61A	
44	21-NOV-2012 00:44	1120A045.d	1	VS61B	
45	21-NOV-2012 01:02	1120A046.d	1	VS61C	
46	21-NOV-2012 01:19	1120A047.d	1	DS	
47	21-NOV-2012 01:37	1120A048.d	1	INDAE	
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49	21-NOV-2012 02:13	1120A050.d	1	WNDE	
50	21-NOV-2012 02:31	1120A051.d	1	VR10MBS1	
51	21-NOV-2012 02:48	1120A052.d	1	VR10A	
52	21-NOV-2012 03:06	1120A053.d	1	VR38MBS1	
53	21-NOV-2012 03:24	1120A054.d	1	VR38LCSS1	
54	21-NOV-2012 03:42	1120A055.d	1	VR38J	5
55	21-NOV-2012 04:00	1120A056.d	1	VR38K	5
56	21-NOV-2012 04:17	1120A057.d	1	VR58A	5
57	21-NOV-2012 04:35	1120A058.d	1	VR58B	5
58	21-NOV-2012 04:53	1120A059.d	1	VR58C	5
59	21-NOV-2012 05:11	1120A060.d	1	VR58D	5
60	21-NOV-2012 05:29	1120A061.d	1	VR58E	5
61	21-NOV-2012 05:46	1120A062.d	1	VR58F	5
62	21-NOV-2012 06:04	1120A063.d	1	VR58G	
63	21-NOV-2012 06:22	1120A064.d	1	VR58GMS	
64	21-NOV-2012 06:40	1120A065.d	1	VR58GMSD	
65	21-NOV-2012 06:58	1120A066.d	1	DS	
66	21-NOV-2012 07:16	1120A067.d	1	INDAE	
67	21-NOV-2012 07:33	1120A068.d	1	WNDE	

StarLIMS

YZ 11/21/12.

egible.
ks In StarLIMS

Revision 001
2/10/11

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121003PEST.b/1120-1.b/1120A022.d ARI ID: INDAE
Data file 2: /chem2/ecd6.i/20121003PEST.b/1120-2.b/1120A022.d Client ID:
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 20-NOV-2012 17:54
Compound Sublist: INDA Report Date: 11/21/2012 12:32
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.003	-0.007	4467185	3.185	-0.006	23076296	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.135	-0.013	1807800	4.572	-0.014	10275423	21.7150	20.4115	6.2	alpha-BHC
4.496	-0.001	680834	5.000	-0.007	3839683	19.3467	18.8453	2.6	beta-BHC
4.660	-0.003	1326474	5.305	-0.009	8049117	19.7668	20.1558	1.9	delta-BHC
4.411	-0.013	1591347	4.923	-0.014	8974486	20.8059	19.7202	5.4	gamma-BHC (Lindane)
4.846	-0.016	1431884	5.381	-0.017	8084482	20.6481	19.4028	6.2	Heptachlor
5.130	-0.018	1492823	5.718	-0.017	8187582	21.0794	19.9837	5.3	Aldrin
5.703	-0.020	1382685	6.276	-0.018	7117080	20.2543	19.2696	5.0	Heptachlor epoxide b
6.079	-0.020	1372451	6.662	-0.018	6390779	21.7246	19.2687	12.0	Endosulfan I
6.302	-0.021	2745040	6.920	-0.019	13254062	42.0359	37.7759	10.7	Dieldrin
6.014	-0.014	2476653	6.730	-0.015	12921376	41.0763	38.6242	6.2	4,4'-DDE
6.520	-0.021	2205610	7.209	-0.019	9745062	37.7706	40.9830	8.2	Endrin
6.727	-0.019	2256316	7.400	-0.016	10478448	40.0131	44.0863	9.7	Endosulfan II
6.570	-0.014	2135430	7.269	-0.014	10224874	41.8799	45.5313	8.4	4,4'-DDD
7.493	-0.021	1877893	7.943	-0.017	8394102	39.5652	42.0004	6.0	Endosulfan sulfate
6.826	-0.017	1920121	7.555	-0.016	8218180	37.4522	38.4554	2.6	4,4'-DDT
7.255	-0.016	4399288	8.141	-0.018	16016439	175.5100	175.6649	0.1	Methoxychlor
7.745	-0.021	2566458	8.430	-0.019	9811734	46.2389	49.1470	6.1	Endrin ketone
7.103	-0.020	1775643	7.697	-0.018	8084607	39.0464	43.2074	10.1	Endrin aldehyde
5.826	-0.017	1401475	6.460	-0.016	7137218	20.6461	18.5236	10.8	gamma-Chlordane
5.949	-0.019	1323331	6.597	-0.018	6622590	20.2000	18.4347	9.1	alpha-Chlordane
2.200	-0.010	2233405	2.367	-0.010	9834705	22.1361	19.6296	12.0	Hexachlorobutadiene
3.996	-0.006	1547545	4.450	-0.008	10997151	21.2574	25.3858	17.7	Hexachlorobenzene
8.737	-0.009	4273755	10.082	-0.016	13782505	80.0000	80.0000	0.0	Hexabromobiphenyl
3.662	-0.009	2486836	3.999	-0.009	16161053	37.5700	40.2927	7.0	Tetrachloro-m-xylen
8.592	-0.019	2221659	9.543	-0.023	10057241	38.8972	47.4546	19.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	93.9	100.7	93.9~	115- 0
Decachlorobiphenyl	97.2	118.6	97.2~	115- 0

~ Indicates recovery outside QC Limits

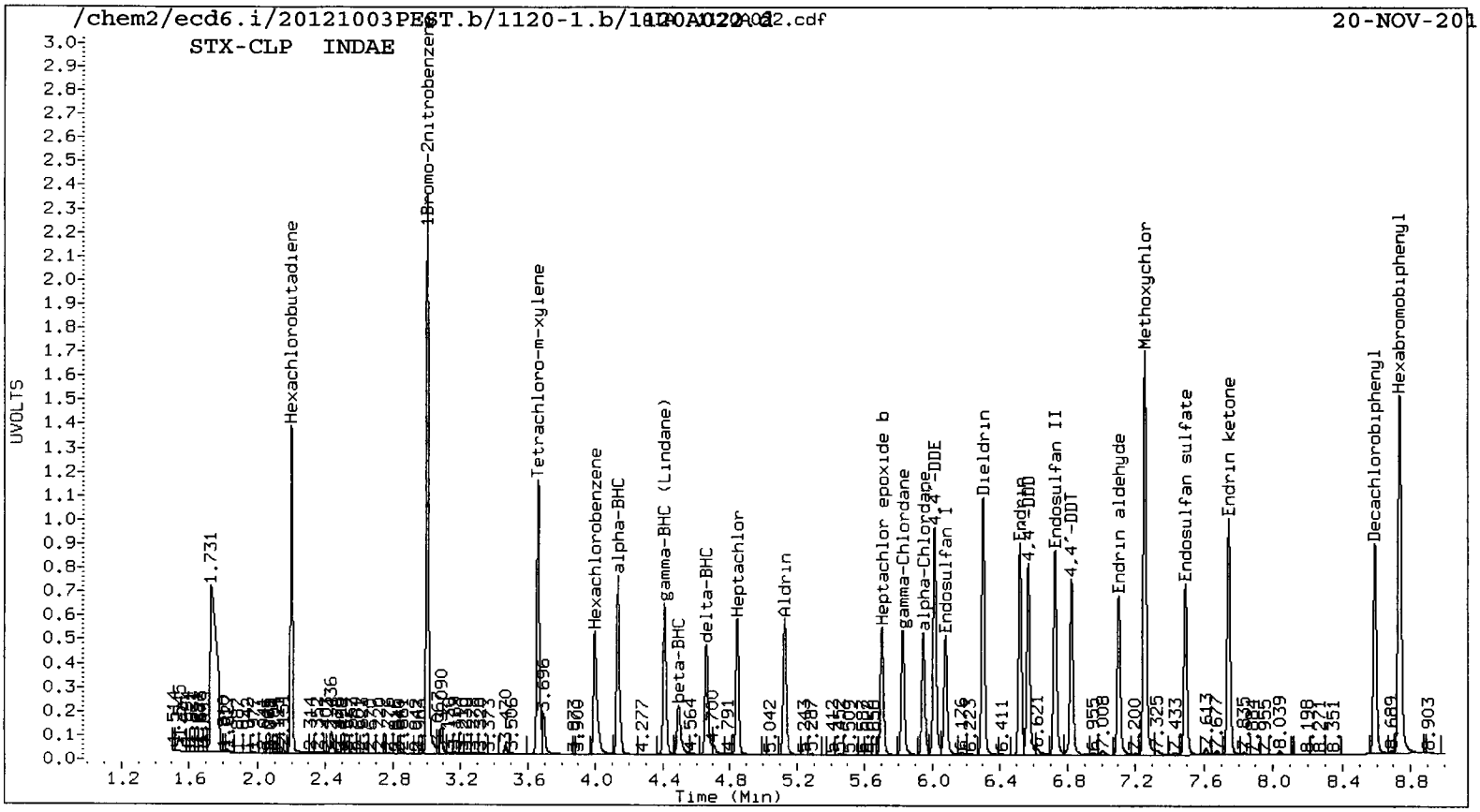
INTERNAL STANDARD SUMMARY

Standard Cpnd	Column 1 Standard Area*	Column 1 Sample Area	Column 1 %D
Bromo-Nitrobenzene	4060064	4467185	10.0
Hexabromobiphenyl	3748709	4273755	14.0

Standard Cpnd	Column 2 Standard Area*	Column 2 Sample Area	Column 2 %D
Bromo-Nitrobenzene	21032891	23076296	9.7
Hexabromobiphenyl	14864285	13782505	-7.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

Cpnd	STX-CLP Col Peak#	RT	Shift	Height	Amount	CLP2 Col Peak#	RT	Shift	Height	Amount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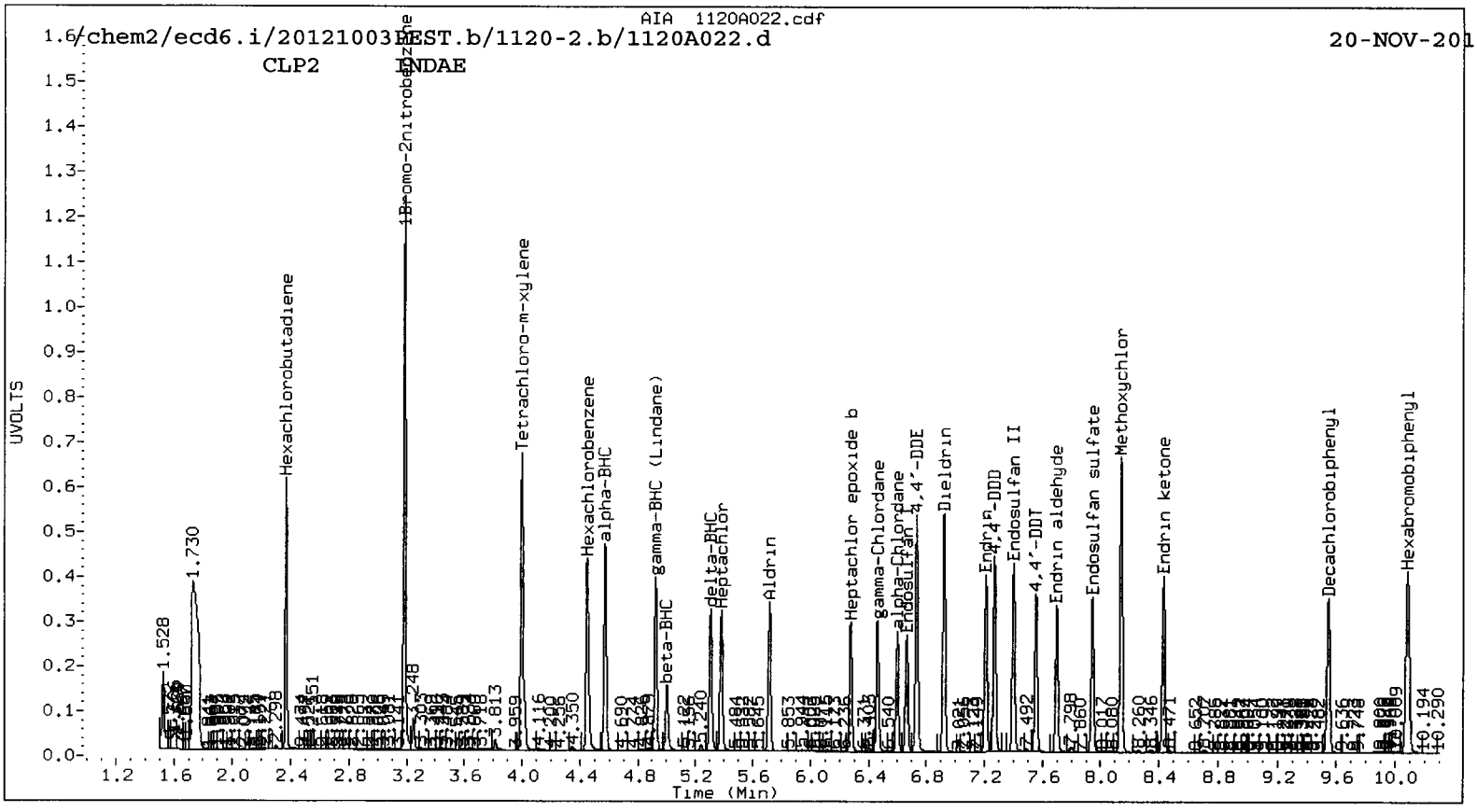
20-NOV-201
STX-CLP INDAE
UVOLTS
Time (Min)
1.731
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Endosulfan I
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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/chem2/ecd6.i/20121003PEST.b/1120-2.b/1120A022.d
20-NOV-201
CLP2 INDAE
UVOLTS
Time (Min)
1.528
1.730
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

KR 11/21/12

Data file 1: /chem2/ecd6.i/20121003PEST.b/1120-1.b/1120A023.d ARI ID: VR80MBW1
Data file 2: /chem2/ecd6.i/20121003PEST.b/1120-2.b/1120A023.d Client ID: VR80MBW1
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 20-NOV-2012 18:12
Compound Sublist: wpest Report Date: 11/21/2012 10:58
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.002	-0.008	4299599	3.185	-0.006	22268800	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.166	0.019	66401	4.575	-0.010	15086	~~0.8287~~	~~0.0311~~	185.6*	alpha-BHC
4.499	0.002	1049	5.006	0.000	19511	0.0310	0.0992	104.9*	beta-BHC
4.682	0.019	1484	5.317	0.003	20223	0.0230	0.0525	78.2*	delta-BHC
4.405	-0.019	1118	4.916	-0.020	29086	0.0152	0.0662	125.4*	gamma-BHC (Lindane)
4.845	-0.017	1639	5.380	-0.017	16226	0.0246	0.0404	48.7*	Heptachlor
----			5.705	-0.031	338207	0.0000	0.8554	---	Aldrin
5.714	-0.010	1970	6.322	0.029	10275	0.0300	0.0288	3.9	Heptachlor epoxide b
6.074	-0.026	2361	----			0.0388	0.0000	---	Endosulfan I
6.277	-0.045	3343	6.920	-0.019	11180	0.0532	0.0330	46.8*	Dieldrin
6.014	-0.014	3478	6.731	-0.015	13238	0.0599	0.0410	37.5	4,4'-DDE
----			----			0.0000	0.0000	---	Endrin
----			7.383	-0.033	12238	0.0000	0.0516	---	Endosulfan II
----			7.268	-0.015	1207	0.0000	0.0054	---	4,4'-DDD
7.494	-0.020	1030	7.940	-0.020	3937	0.0220	0.0197	10.6	Endosulfan sulfate
6.825	-0.017	2734	7.556	-0.015	15988	0.0539	0.0749	32.6	4,4'-DDT
7.240	-0.031	2775	8.141	-0.017	5716	0.1120	0.0628	56.3*	Methoxychlor
7.751	-0.015	13077	8.477	0.028	1250	0.2384	0.0063	189.7*	Endrin ketone
7.104	-0.019	1246	7.697	-0.018	11082	0.0277	0.0593	72.6*	Endrin aldehyde
5.814	-0.029	5370	6.473	-0.003	63003	0.0822	0.1694	69.3*	gamma-Chlordane
5.956	-0.011	1467	6.618	0.003	17087	0.0233	0.0493	71.7*	alpha-Chlordane
2.216	0.006	11499	2.378	0.000	101201	0.1184	0.2093	55.5*	Hexachlorobutadiene
3.994	-0.008	88999	4.450	-0.008	375840	1.2702	0.8990	34.2	Hexachlorobenzene
5.608	-0.019	8557	6.189	-0.013	11763	0.1629	0.0414	118.9*	Oxychlordane
----			6.419	-0.035	15603	0.0000	0.0760	---	2,4-DDE
----			6.548	-0.012	3175	0.0000	0.0111	---	trans-Nonachlor
6.152	-0.038	1912	6.986	0.047	1558	0.0553	0.0101	138.1*	2,4-DDD
----			7.207	-0.020	3420	0.0000	0.0203	---	2,4-DDT
----			----			0.0000	0.0000	---	cis-Nonachlor
----			8.408	-0.026	149362	~~0.0000~~	~~0.9031~~	---	Mirex
8.735	-0.011	4224464	10.082	-0.016	13759898	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.730	-0.007	78843	1.726	-0.002	19467094	~~0.0000~~	~~0.0000~~	---	Hexachloroethane
6.570	-0.011	1512	----			~~0.2612~~	0.0000	---	Kepone
3.661	-0.009	1586420	3.998	-0.010	10519108	24.9011	27.1772	8.7	Tetrachloro-m-xylen
8.591	-0.019	1565225	9.543	-0.023	7174855	27.7240	33.9098	20.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	62.3	67.9	62.3	52-100
Decachlorobiphenyl	69.3	84.8	69.3	54-100

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

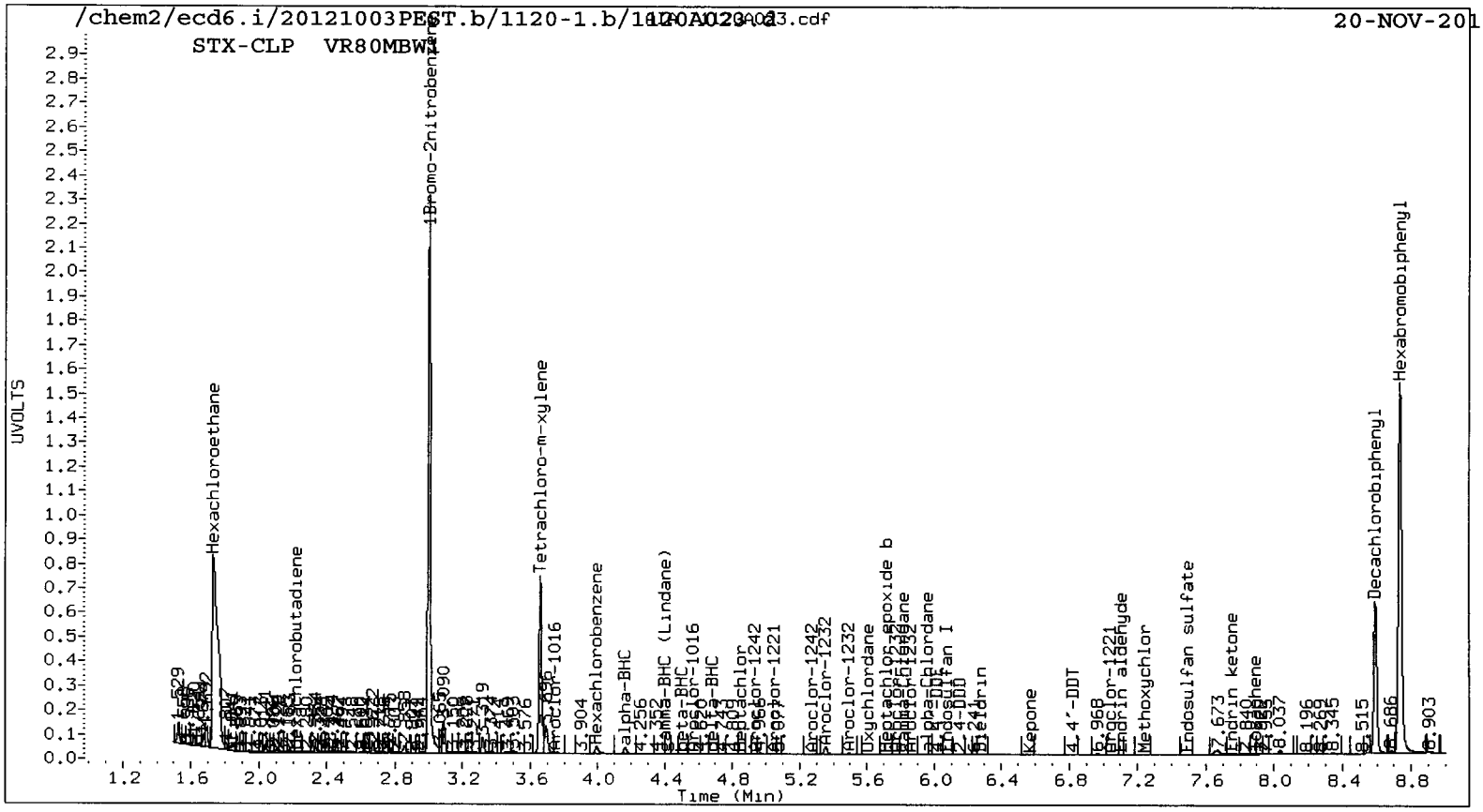
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4299599	5.9
Hexabromobiphenyl	3748709	4224464	12.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	22268800	5.9
Hexabromobiphenyl	14864285	13759898	-7.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col				CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	---			0.000	1	7.132	-0.026	2622	0.4
Toxaphene	2	6.825	-0.019	2734	2.1	2	7.445	-0.037	73097	7.4
Toxaphene	3	7.240	0.028	2775	2.7	3	7.697	-0.017	11082	1.0
Toxaphene	4	7.494	0.028	1030	0.8	4	8.181	0.002	5270	0.7
Toxaphene	5	7.751	0.006	13077	12.0	5	8.525	-0.002	2082	0.6
Toxaphene	6	7.890	0.015	2348	3.1	NS	---			----
Total STX-CLPAve (5 peaks): 4.139						Total CLP2Ave (5 peaks): 2.041			RPD = 68*	
Corrected Ave (4 peaks): 2.182						Corrected Ave (4 peaks): 0.695			RPD = 103*	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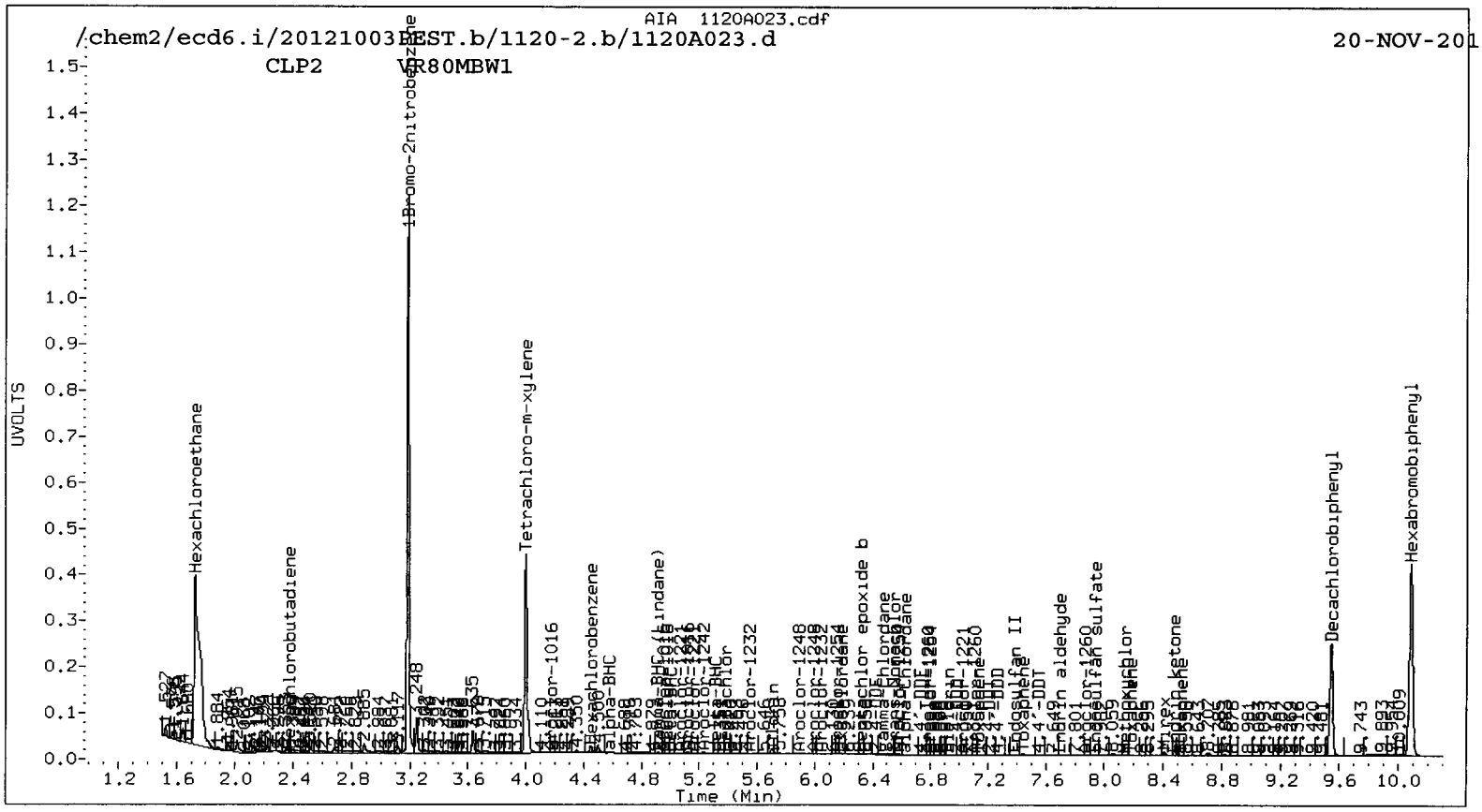
20-NOV-201
STX-CLP VR80MBW1
UVOLTS
Time (Min)
Hexachloroethane
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aroclor-1016
Aldrin
Aroclor-1242
Aroclor-1232
Aroclor-1248
Aroclor-1254
Aroclor-1221
Oxychlordane
Heptachlor epoxide b
Dieldrin
4,4'-DDE
Endosulfan I
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Chlorobenzilate
Decachlorobiphenyl
Hexabromobiphenyl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20-NOV-201
CLP2 VR80MBW1
UVOLTS
Time (Min)
Hexachloroethane
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
Heptachlor
Aroclor-1016
Aldrin
Aroclor-1232
Aroclor-1248
Aroclor-1254
Aroclor-1221
Heptachlor epoxide b
Dieldrin
4,4'-DDE
Endosulfan I
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Chlorobenzilate
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /chem2/ecd6.i/20121003PEST.b/1120-1.b/1120A024.d ARI ID: VR80LCSW1
Data file 2: /chem2/ecd6.i/20121003PEST.b/1120-2.b/1120A024.d Client ID: VR80LCSW1
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 20-NOV-2012 18:30
Compound Sublist: wpest Report Date: 11/21/2012 11:13
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.003	-0.007	4483054	3.185	-0.006	23416656	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.134	-0.014	1522487	4.572	-0.014	8493902	18.2232	16.6274	9.2	alpha-BHC
4.493	-0.004	613608	4.999	-0.008	3548561	17.3747	17.1633	1.2	beta-BHC
4.657	-0.006	536549	5.303	-0.011	3261267	7.9672	8.0479	1.0	delta-BHC
4.410	-0.014	1386966	4.922	-0.014	7890998	18.0695	17.0874	5.6	gamma-BHC (Lindane)
4.845	-0.017	1159505	5.380	-0.017	6654769	16.6611	15.7394	5.7	Heptachlor
5.130	-0.019	1245748	5.719	-0.017	6569509	17.5283	15.8014	10.4	Aldrin
5.702	-0.021	1301274	6.275	-0.018	6763044	18.9943	18.0449	5.1	Heptachlor epoxide b
6.079	-0.021	1271095	6.662	-0.018	6189487	20.0490	18.3906	8.6	Endosulfan I
6.301	-0.021	2603721	6.920	-0.019	12752070	39.7307	35.8169	10.4	Dieldrin
6.011	-0.016	2369522	6.729	-0.016	12274037	39.1604	36.1559	8.0	4,4'-DDE
6.519	-0.022	2062956	7.209	-0.019	9209600	34.3650	37.0501	7.5	Endrin N
6.726	-0.020	2192894	7.399	-0.017	10310642	37.8288	41.4975	9.2	Endosulfan II
6.568	-0.016	2073710	7.268	-0.015	10011947	39.5612	42.6481	7.5	4,4'-DDD M
7.492	-0.022	1456692	7.942	-0.018	6625628	29.8546	31.7129	6.0	Endosulfan sulfate
6.824	-0.018	1701382	7.555	-0.016	7303728	32.2814	32.6931	1.3	4,4'-DDT
7.253	-0.018	4038181	8.139	-0.019	15107771	156.7137	158.5071	1.1	Methoxychlor
7.745	-0.022	2517498	8.429	-0.020	9860968	44.1209	47.2498	6.8	Endrin ketone
7.102	-0.021	1388449	7.697	-0.018	6435296	29.7000	32.9001	10.2	Endrin aldehyde
5.825	-0.018	1303589	6.459	-0.017	6763890	19.1361	17.2995	10.1	gamma-Chlordane
5.948	-0.019	1237342	6.597	-0.018	6234796	18.8206	17.1029	9.6	alpha-Chlordane M
2.199	-0.011	1102296	2.367	-0.010	5040599	10.8866	9.9146	9.3	Hexachlorobutadiene
3.995	-0.007	1143214	4.450	-0.008	8099360	15.6478	18.4248	16.3	Hexachlorobenzene
5.613	-0.014	13081	6.172	-0.031	25573	0.2395	0.0856	94.6*	Oxychlordane
5.702	-0.001	1301274	----			32.4087	0.0000	---	2,4-DDE
5.948	-0.003	1237342	6.540	-0.020	27731	19.0173	0.0926	198.1*	trans-Nonachlor
6.174	-0.016	32734	----			0.9101	0.0000	---	2,4-DDD
6.409	-0.020	14445	7.209	-0.018	9209600	0.3548	52.3134	197.3*	2,4-DDT
----			----			0.0000	0.0000	---	cis-Nonachlor
7.432	-0.005	29584	8.471	0.037	107154	0.6449	0.6187	4.1	Mirex
8.735	-0.011	4393472	10.082	-0.016	14407841	80.0000	80.0000	0.0	Hexabromobiphenyl
1.731	-0.006	42866	1.727	-0.001	12846764	0.0000	0.0000	---	Hexachloroethane
6.568	-0.013	2073710	----			344.5203	0.0000	---	Kepone
3.661	-0.009	1637294	3.998	-0.009	10947414	24.6479	26.8974	8.7	Tetrachloro-m-xylen
8.591	-0.020	1577527	9.543	-0.023	7282388	26.8670	32.8702	20.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	61.6	67.2	61.6	52-100
Decachlorobiphenyl	67.2	82.2	67.2	54-100
4,4'-DDE	0.0	0.0	0.0~	0- 0
Endrin	85912.6	0.0	0.0~	10-200
4,4'-DDD	0.0	0.0	0.0~	0- 0
4,4'-DDT	80703.5	0.0	0.0~	0- 0
Endrin ketone	0.0	0.0	0.0~	0- 0
Endrin aldehyde	0.0	0.0	0.0~	0- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

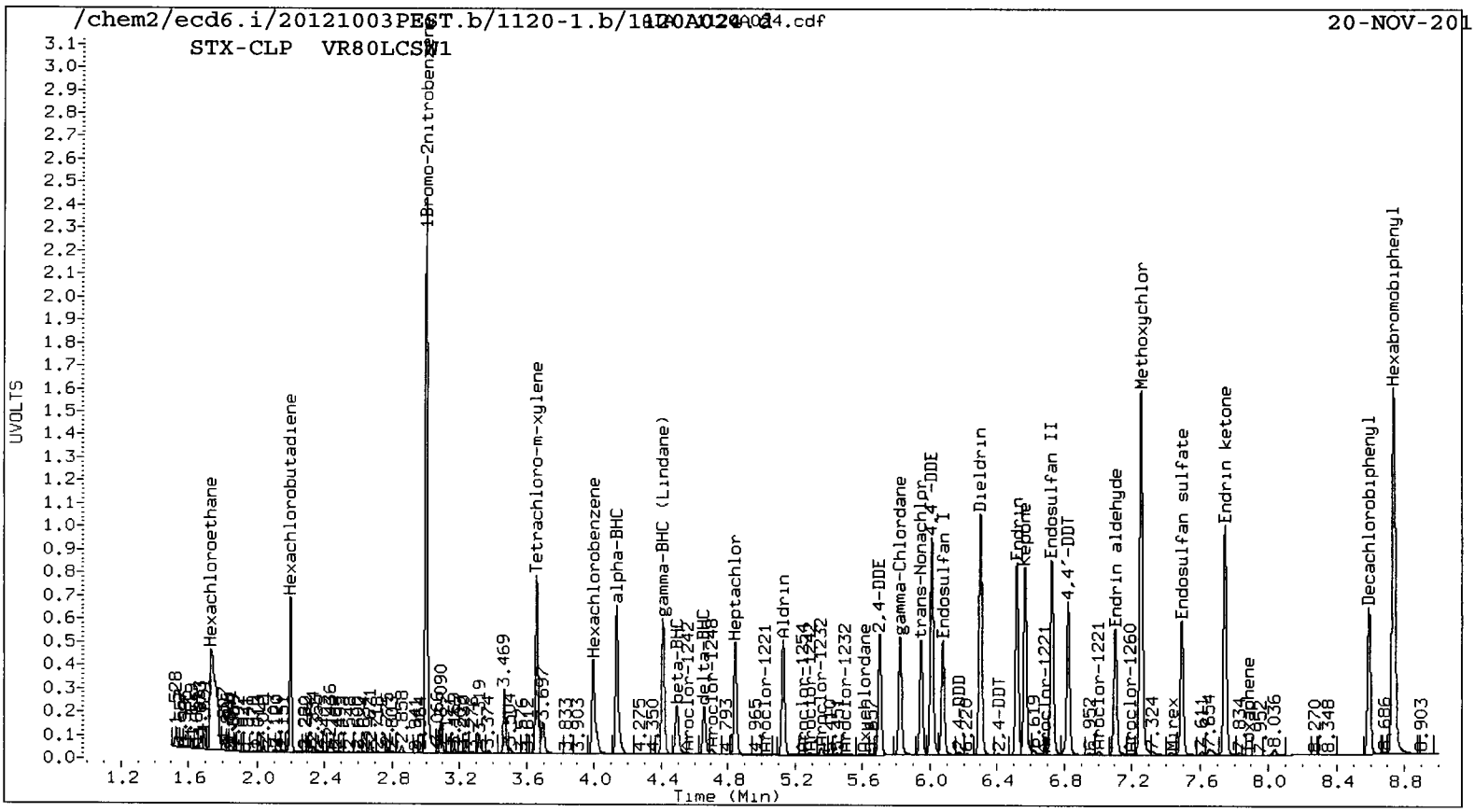
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4483054	10.4
Hexabromobiphenyl	3748709	4393472	17.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	23416656	11.3
Hexabromobiphenyl	14864285	14407841	-3.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col			
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.519	0.028	2062956	2057.1	1	7.147	-0.011	50657	7.1
Toxaphene	2	6.824	-0.019	1701382	1270.6	2	7.490	0.008	105179	10.2
Toxaphene	3	7.194	-0.018	24159	22.3	3	7.697	-0.016	6435296	577.8
Toxaphene	4	7.492	0.026	1456692	1096.4	4	8.139	-0.040	15107771	1963.9
Toxaphene	5	7.745	0.000	2517498	2215.1	5	8.557	0.031	7803	2.3
Toxaphene	6	7.881	0.007	2292	2.9	NS	---			----
Total STX-CLPAve (6 peaks): 1110.739						Total CLP2Ave (5 peaks): 512.272				RPD = 74*
Corrected Ave (4 peaks): 598.054						Corrected Ave (4 peaks): 149.362				RPD = 120*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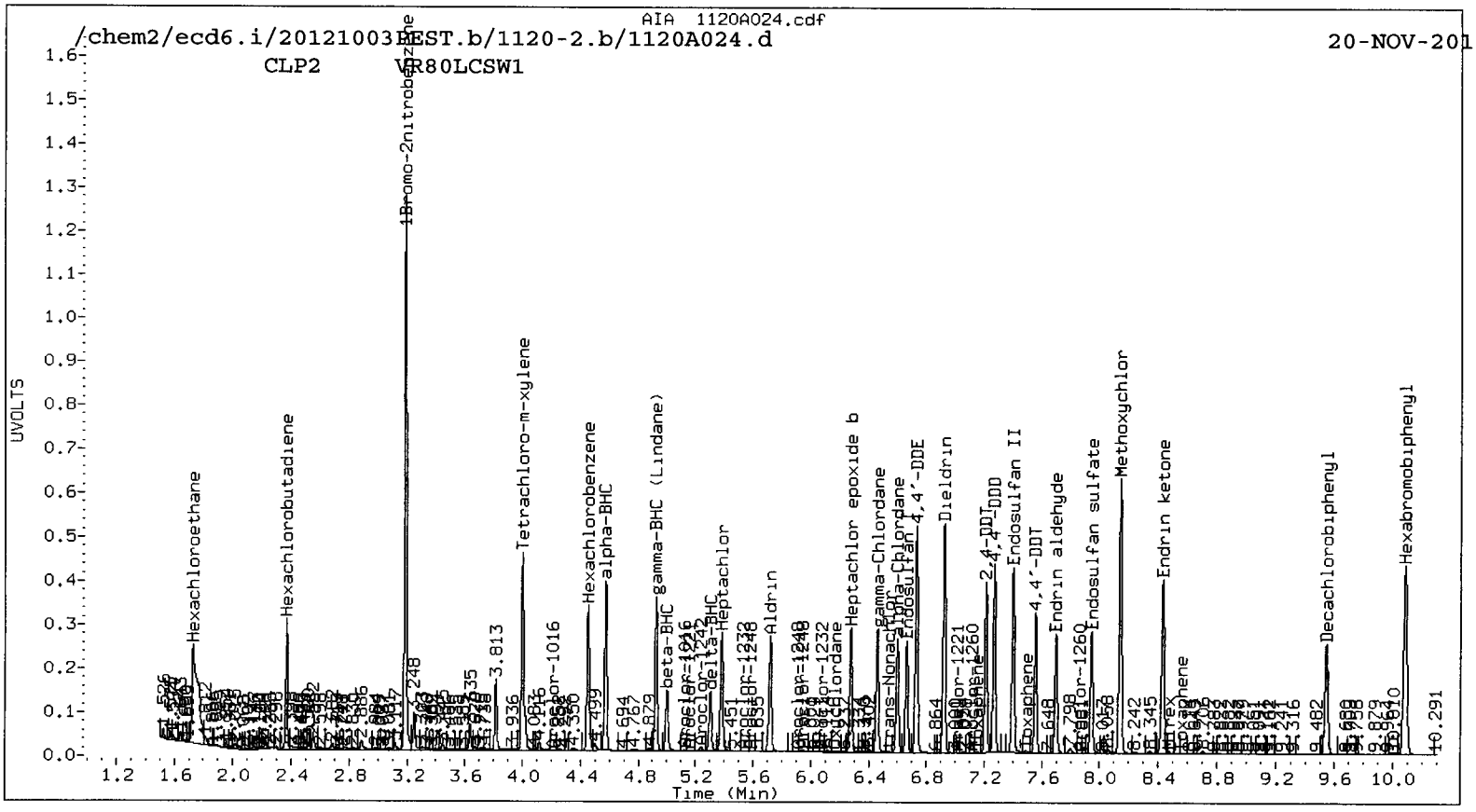
STX-CLP VR80LCSW1
UVOLTS
Time (Min)
Hexachloroethane
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
Aroclor-1242
delta-BHC
Heptachlor
Aldrin
Aroclor-1221
Aroclor-1254
Aroclor-1232
Chlordane
2,4-DDE
gamma-Chlordane
trans-Nonachlor
4,4'-DDE
Endosulfan I
Dieldrin
2,4-DDT
Endrin
Kepone
Endosulfan II
4,4'-DDT
Aroclor-1260
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Mirex
Decachlorobiphenyl
Hexabromobiphenyl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20-NOV-201
CLP2 VR80LCSW1
UVOLTS
Time (Min)
Hexachloroethane
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
Aroclor-1016
Aroclor-1242
delta-BHC
Heptachlor
Aldrin
Aroclor-1248
Aroclor-1232
Chlordane
Heptachlor epoxide b
gamma-Chlordane
trans-Nonachlor
alpha-Chlordane
Endosulfan I
4,4'-DDE
Dieldrin
Aroclor-1221
Aroclor-1260
2,4'-DDT
4,4'-DDD
Endosulfan II
Toxaphene
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Mirex
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 11/21/12

Data file 1: /chem2/ecd6.i/20121003PEST.b/1120-1.b/1120A025.d ARI ID: VR80LCSDW1
Data file 2: /chem2/ecd6.i/20121003PEST.b/1120-2.b/1120A025.d Client ID: VR80LCSDW1
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 20-NOV-2012 18:48
Compound Sublist: wpest Report Date: 11/21/2012 10:58
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.003	-0.007	4644932	3.184	-0.006	24399823	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.134	-0.014	1393949	4.571	-0.014	8070593	16.1032	15.1621	6.0	alpha-BHC
4.493	-0.004	584434	4.998	-0.008	3416247	15.9719	15.8576	0.7	beta-BHC
4.658	-0.005	522195	5.304	-0.011	3240013	7.4838	7.6732	2.5	delta-BHC
4.410	-0.014	1323237	4.922	-0.014	7614975	16.6385	15.8252	5.0	gamma-BHC (Lindane)
4.845	-0.017	1108862	5.380	-0.017	6443854	15.3781	14.6264	5.0	Heptachlor
5.130	-0.018	1197238	5.719	-0.016	6426044	16.2587	14.8335	9.2	Aldrin
5.703	-0.020	1285661	6.275	-0.018	6734222	18.1123	17.2440	4.9	Heptachlor epoxide b
6.079	-0.020	1260290	6.663	-0.018	6220315	19.1858	17.7375	7.8	Endosulfan I
6.302	-0.021	2583605	6.920	-0.019	12775749	38.0498	34.4375	10.0	Dieldrin
6.012	-0.015	2322672	6.730	-0.016	12181034	37.0483	34.4362	7.3	4,4'-DDE
6.519	-0.021	2039634	7.209	-0.019	9190848	33.0735	35.8208	8.0	Endrin N
6.727	-0.019	2167463	7.400	-0.016	10296116	36.3963	40.1458	9.8	Endosulfan II
6.568	-0.016	2051685	7.268	-0.015	10041561	38.1007	41.4394	8.4	4,4'-DDD M
7.492	-0.022	1419249	7.942	-0.018	6534482	28.3141	30.3006	6.8	Endosulfan sulfate
6.825	-0.018	1692028	7.556	-0.015	7392463	31.2506	32.0576	2.5	4,4'-DDT
7.254	-0.017	4029383	8.140	-0.018	15222496	152.2160	154.7266	1.6	Methoxychlor
7.745	-0.021	2506780	8.430	-0.019	9789859	42.7654	45.4451	6.1	Endrin ketone
7.102	-0.021	1377732	7.698	-0.017	6433243	28.6875	31.8632	10.5	Endrin aldehyde
5.825	-0.017	1282979	6.460	-0.016	6712079	18.1772	16.4753	9.8	gamma-Chlordane
5.948	-0.019	1212280	6.597	-0.018	6190583	17.7968	16.2974	8.8	alpha-Chlordane
2.200	-0.010	1082419	2.367	-0.010	5011729	10.3177	9.4606	8.7	Hexachlorobutadiene
3.995	-0.007	1058880	4.449	-0.009	7579715	13.9884	16.5479	16.8	Hexachlorobenzene
5.612	-0.015	13551	6.173	-0.030	27391	0.2415	0.0880	93.1*	Oxychlordane
5.657	-0.046	4811	----			0.1166	0.0000	---	2,4-DDE
----			6.542	-0.019	31762	0.0000	0.1027	---	trans-Nonachlor
6.175	-0.015	32950	----			0.8917	0.0000	---	2,4-DDD
6.410	-0.019	14129	7.209	-0.018	9190848	0.3378	50.5777	197.3*	2,4-DDT
----			----			0.0000	0.0000	---	cis-Nonachlor
7.433	-0.004	28212	8.471	0.037	105238	0.5986	0.5887	1.7	Mirex
8.735	-0.010	4513436	10.082	-0.016	14871950	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.732	-0.006	32622	1.728	0.000	11057536	0.0000	0.0000	---	Hexachloroethane
6.568	-0.013	2051685	----			331.8013	0.0000	---	Kepone
3.661	-0.009	1519778	3.998	-0.010	10238165	22.0815	24.1412	8.9	Tetrachloro-m-xylen
8.591	-0.019	1529169	9.542	-0.024	7111130	25.3512	31.0956	20.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	55.2	60.4	55.2	52-100
Decachlorobiphenyl	63.4	77.7	63.4	54-100
4,4'-DDE	0.0	0.0	0.0~	0- 0
Endrin	82683.7	0.0	0.0~	10-200
4,4'-DDD	0.0	0.0	0.0~	0- 0
4,4'-DDT	78126.5	0.0	0.0~	0- 0
Endrin ketone	0.0	0.0	0.0~	0- 0
Endrin aldehyde	0.0	0.0	0.0~	0- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

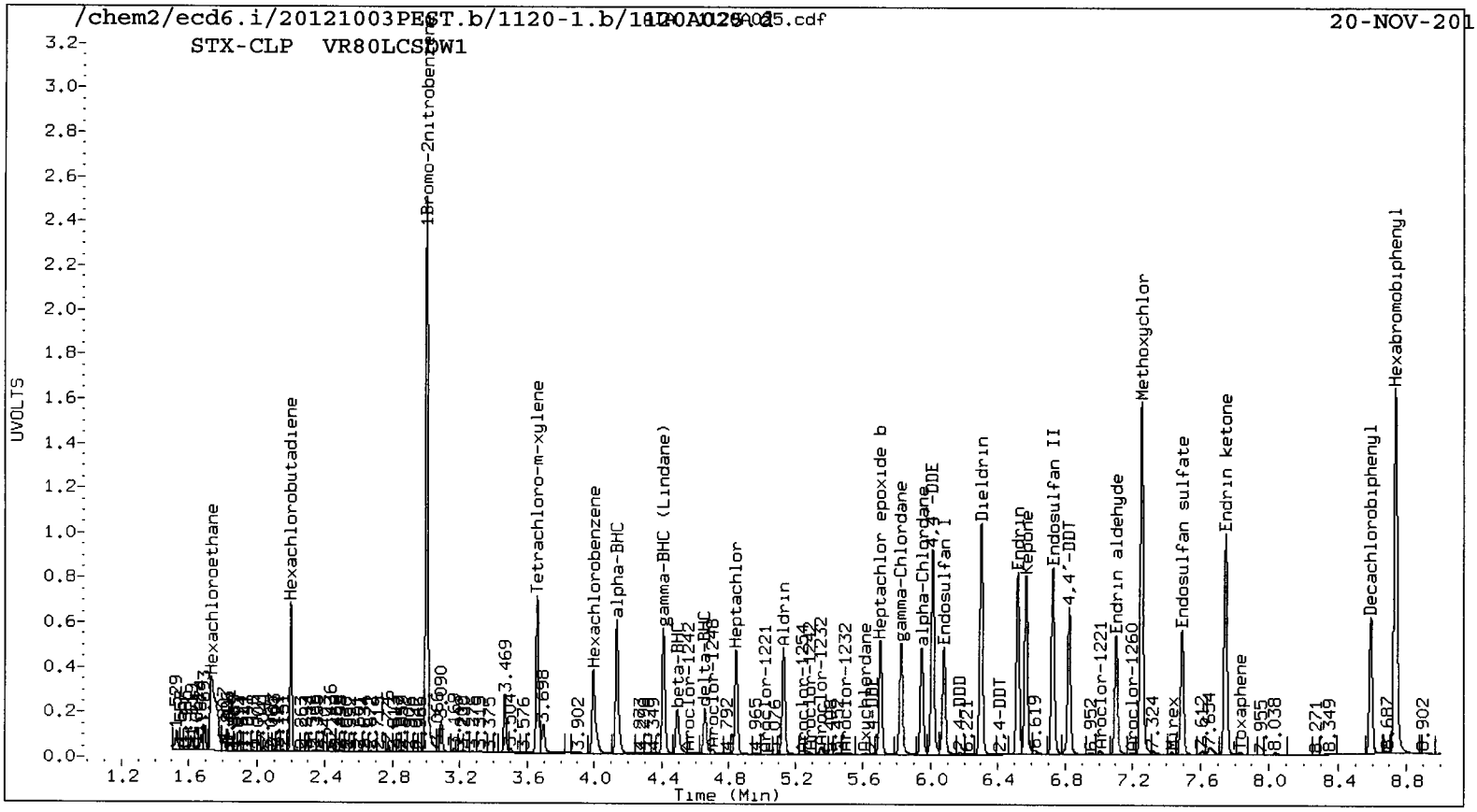
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4644932	14.4
Hexabromobiphenyl	3748709	4513436	20.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	24399823	16.0
Hexabromobiphenyl	14864285	14871950	0.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col			
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.519	0.029	2039634	1979.8	1	7.148	-0.011	50779	6.9
Toxaphene	2	6.825	-0.019	1692028	1230.0	2	7.491	0.008	109869	10.3
Toxaphene	3	7.196	-0.016	23260	20.9	3	7.698	-0.016	6433243	559.6
Toxaphene	4	7.492	0.026	1419249	1039.8	4	8.140	-0.040	15222496	1917.1
Toxaphene	5	7.745	0.000	2506780	2147.1	5	---			0.0
Toxaphene	6	7.834	-0.040	31145	39.0	NS	---			----
Total STX-CLPAve (6 peaks): 1076.090						Total CLP2Ave (4 peaks): 623.488				RPD = 53*
Corrected Ave (4 peaks): 582.422						Corrected Ave (3 peaks): 192.295				RPD = 101*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20-NOV-201
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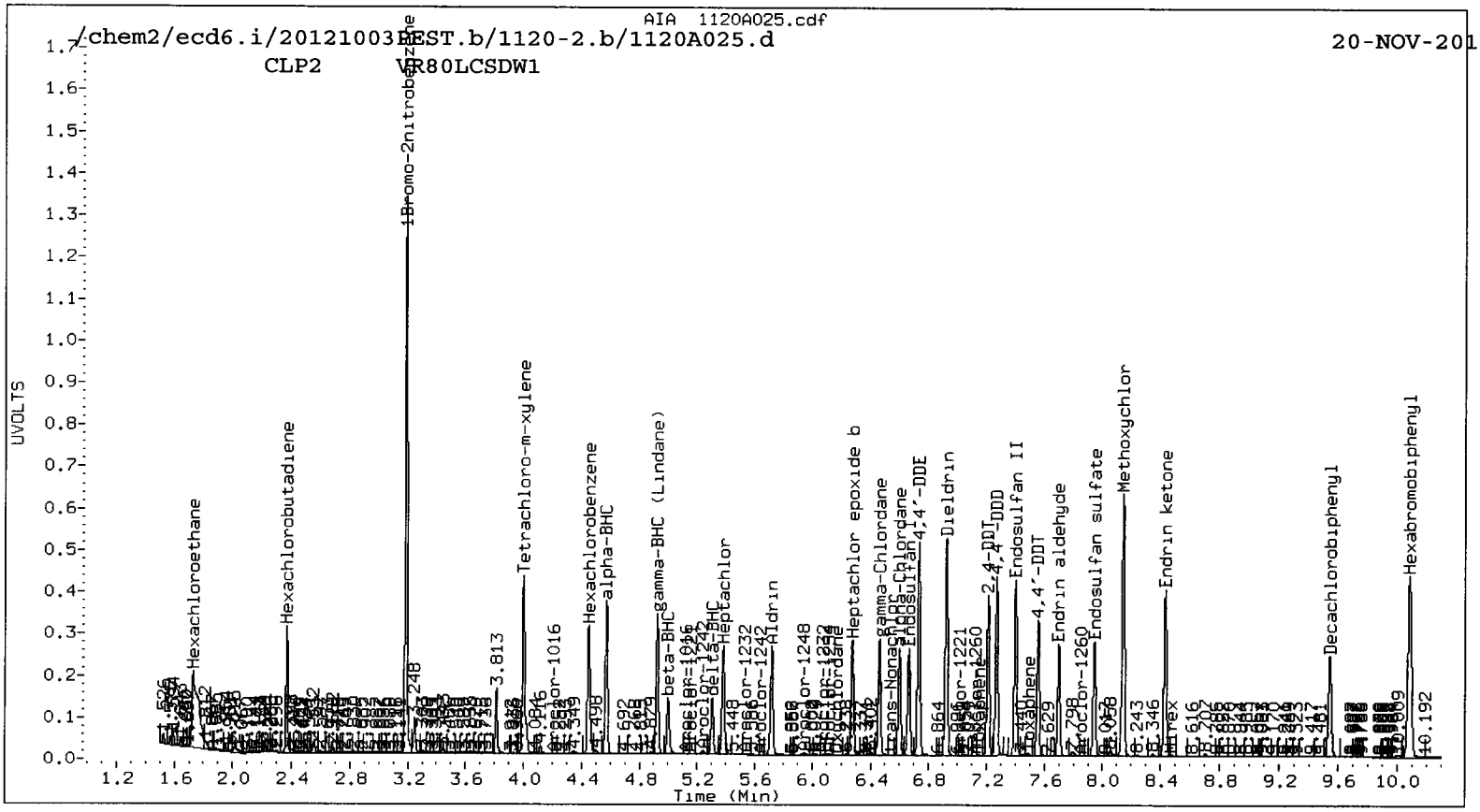
UVOLTS
Time (Min)
1Bromo-2nitrobenzene
Hexachloroethane
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
Aroclor-1242
delta-BHC
Heptachlor
Aroclor-1221
Aldrin
Aroclor-1254
Aroclor-1232
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Endosulfan I
Dieldrin
2,4-DDT
Endrin
Kepone
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Aroclor-1260
Endosulfan sulfate
Endrin ketone
Mirex
Toxaphene
Decachlorobiphenyl
Hexabromobiphenyl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20-NOV-201
CLP2 VR80LCSDW1
UVOLTS
Time (Min)
1Bromo-2nitrobenzene
Hexachloroethane
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
Aroclor-1016
Aroclor-1242
delta-BHC
Heptachlor
Aroclor-1232
Aldrin
Aroclor-1248
Heptachlor epoxide b
gamma-Chlordane
trans-Nonachlor
alpha-Chlordane
4,4'-DDE
Endosulfan I
Dieldrin
Aroclor-1221
Aroclor-1260
2,4-DDT
4,4'-DDD
Endosulfan II
Toxaphene
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Mirex
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 11/21/12

Data file 1: /chem2/ecd6.i/20121003PEST.b/1120-1.b/1120A026.d ARI ID: VR80A
Data file 2: /chem2/ecd6.i/20121003PEST.b/1120-2.b/1120A026.d Client ID: HT-01-W-C-121107
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 20-NOV-2012 19:06
Compound Sublist: wpest Report Date: 11/21/2012 10:58
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.003	-0.007	4598125	3.185	-0.006	23792114	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.120	-0.027	6562	4.572	-0.013	37653	0.0766	0.0725	5.4	alpha-BHC
4.476	-0.021	3045	5.009	0.002	19124	0.0841	0.0910	8.0	beta-BHC
4.642	-0.021	5280	5.315	0.001	64186	0.0764	0.1559	68.4*	delta-BHC
4.407	-0.017	8503	4.922	-0.014	99551	0.1080	0.2122	65.1*	gamma-BHC (Lindane)
4.865	0.003	4041	5.389	-0.008	3133	0.0566	0.0073	154.3*	Heptachlor
5.157	0.008	2268	5.703	-0.032	328652	0.0311	0.7780	184.6*	Aldrin
5.713	-0.010	34871	6.255	-0.039	249975	0.4963	0.6564	27.8	Heptachlor epoxide b
6.080	-0.020	10082	6.643	-0.037	79938	0.1550	0.2338	40.5*	Endosulfan I
6.299	-0.023	1382	6.916	-0.023	12410	0.0206	0.0343	50.1*	Dieldrin
6.011	-0.016	4124	6.729	-0.017	14672	0.0665	0.0425	43.9*	4,4'-DDE
----			----			0.0000	0.0000	---	Endrin
6.729	-0.017	1031	7.402	-0.014	7426	0.0173	0.0288	49.6*	Endosulfan II
----			7.265	-0.018	7806	0.0000	0.0320	---	4,4'-DDD
7.508	-0.005	5581	7.950	-0.010	132109	0.1115	0.6089	138.1*	Endosulfan sulfate
6.824	-0.019	4061	7.576	0.005	23213	0.0751	0.1001	28.5	4,4'-DDT
7.253	-0.017	4617	8.164	0.005	63796	0.1747	0.6445	114.7*	Methoxychlor
7.747	-0.020	15244	8.464	0.015	3880	0.2605	0.0179	174.3*	Endrin ketone
7.104	-0.020	2790	7.727	0.012	94544	0.0582	0.4654	155.5*	Endrin aldehyde
5.854	0.012	5144	6.466	-0.010	111032	0.0736	0.2795	116.6*	gamma-Chlordane
----			6.615	0.000	7215	0.0000	0.0195	---	alpha-Chlordane
2.211	0.001	3693	2.377	0.000	31462	0.0356	0.0609	52.6*	Hexachlorobutadiene
3.992	-0.010	35451	4.448	-0.010	38686	0.4731	0.0866	138.1*	Hexachlorobenzene
5.606	-0.021	8170	6.155	-0.048	64694	0.1458	0.2132	37.5	Oxychlordane
----			----			0.0000	0.0000	---	2,4-DDE
5.926	-0.025	20623	6.546	-0.015	52766	0.3091	0.1696	58.3*	trans-Nonachlor
----			6.893	-0.046	13983	0.0000	0.0834	---	2,4-DDD
6.393	-0.036	1092	7.212	-0.014	24668	0.0262	0.1349	135.1*	2,4-DDT
6.560	-0.007	5459	----			0.0772	0.0000	---	cis-Nonachlor
7.409	-0.028	6215	8.407	-0.027	145985	0.1321	0.8117	144.0*	Mirex
8.732	-0.014	4505948	10.080	-0.018	14962876	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.730	-0.007	28925	1.726	-0.002	10520659	0.0000	0.0000	---	Hexachloroethane
----			7.332	-0.005	5330	0.0000	0.2618	---	Kepone
3.661	-0.010	1540763	3.998	-0.010	9747509	22.6143	23.5713	4.1	Tetrachloro-m-xylene
8.590	-0.021	1723945	9.542	-0.024	7979659	28.6278	34.6814	19.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	56.5	58.9	56.5	52-100
Decachlorobiphenyl	71.6	86.7	71.6	54-100

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

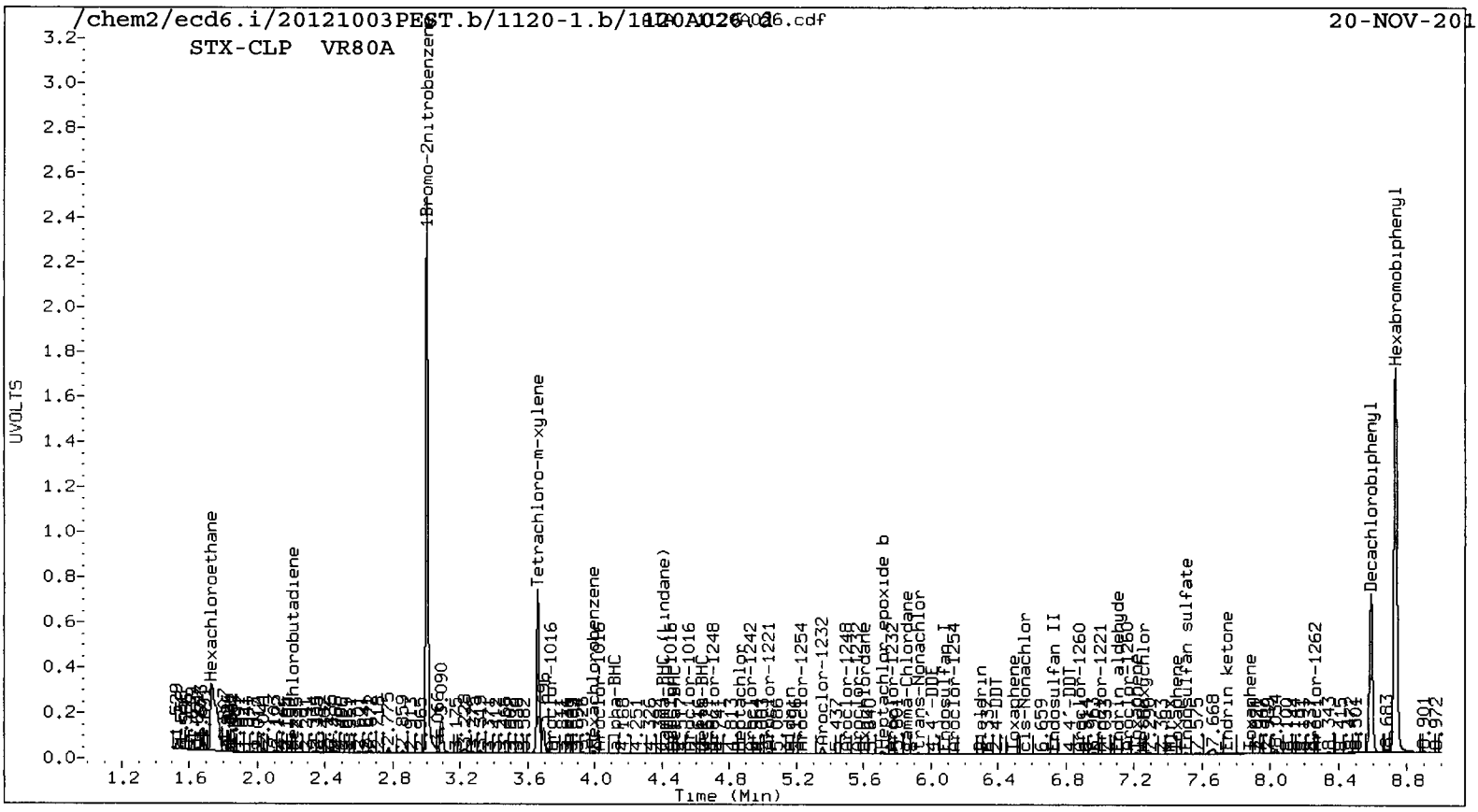
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4598125	13.3
Hexabromobiphenyl	3748709	4505948	20.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	23792114	13.1
Hexabromobiphenyl	14864285	14962876	0.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col				CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.489	-0.001	1719	1.7	1	7.118	-0.041	7929	1.1
Toxaphene	2	6.824	-0.020	4061	3.0	2	7.491	0.008	28800	2.7
Toxaphene	3	7.213	0.001	9615	8.6	3	7.727	0.014	94544	8.2
Toxaphene	4	7.453	-0.013	1935	1.4	4	8.164	-0.016	63796	8.0
Toxaphene	5	7.747	0.002	15244	13.1	5	8.533	0.007	42486	11.9
Toxaphene	6	7.883	0.009	11283	14.1	NS	---			----
	Total STX-CLPAve (6 peaks): 6.985					Total CLP2Ave (5 peaks): 6.366			RPD = 9	
	Corrected Ave (4 peaks): 3.674					Corrected Ave (4 peaks): 4.981			RPD = 30	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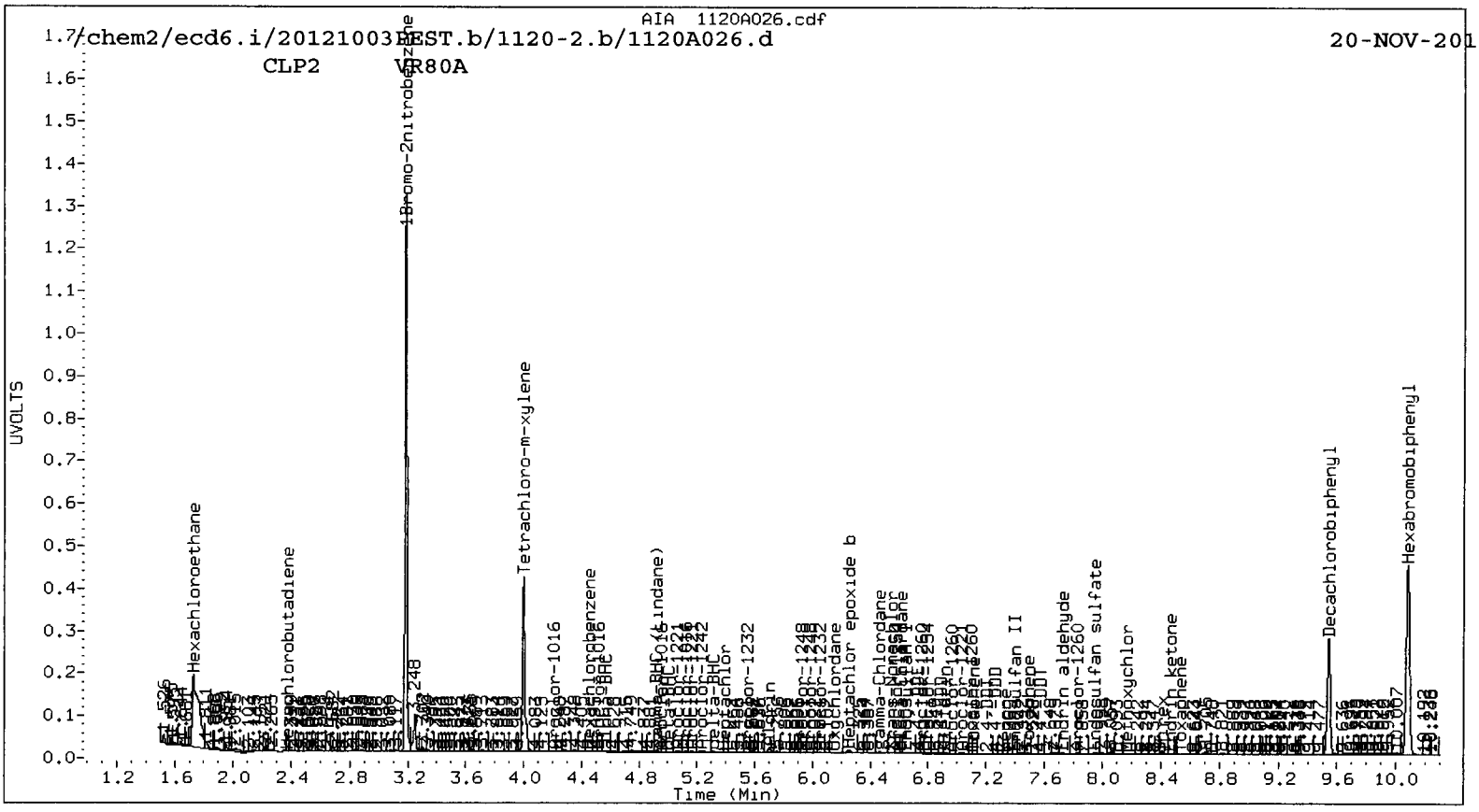
20-NOV-201
STX-CLP VR80A
UVOLTS
Time (Min)
Hexachloroethane
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Decachlorobiphenyl
Hexabromobiphenyl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20-NOV-201
CLP2 VR80A
UVOLTS
Time (Min)
Hexachloroethane
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

KZ 11/24/12

Data file 1: /chem2/ecd6.i/20121003PEST.b/1120-1.b/1120A027.d ARI ID: VR80B
Data file 2: /chem2/ecd6.i/20121003PEST.b/1120-2.b/1120A027.d Client ID: HT-04-W-C-121107
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 20-NOV-2012 19:23
Compound Sublist: wpest Report Date: 11/21/2012 10:58
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.002	-0.008	4417029	3.184	-0.006	22967986	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.121	-0.027	5426	4.571	-0.015	27834	~~0.0659~~	~~0.0556~~	17.1	alpha-BHC
4.477	-0.020	2727	5.009	0.003	23786	0.0784	0.1173	39.8	beta-BHC
4.642	-0.021	2987	5.317	0.003	68951	0.0450	0.1735	117.6*	delta-BHC
4.408	-0.016	8019	4.923	-0.014	94020	0.1060	0.2076	64.8*	gamma-BHC (Lindane)
4.865	0.003	4872	----			0.0711	0.0000	---	Heptachlor
5.117	-0.031	1936	5.704	-0.032	340733	0.0276	0.8356	187.2*	Aldrin
5.711	-0.012	7285	6.247	-0.047	125683	0.1079	0.3419	104.0*	Heptachlor epoxide b
6.082	-0.017	10088	6.644	-0.036	92683	0.1615	0.2808	53.9*	Endosulfan I
6.299	-0.024	1119	6.914	-0.025	23556	0.0173	0.0675	118.2*	Dieldrin
6.012	-0.015	2588	6.732	-0.014	18003	0.0434	0.0541	21.9	4,4'-DDE
6.491	-0.050	1610	7.216	-0.012	18575	0.0270	0.0746	93.6*	Endrin
----			7.399	-0.017	5104	0.0000	0.0205	---	Endosulfan II
----			7.267	-0.016	6955	0.0000	0.0296	---	4,4'-DDD
7.519	0.006	7217	7.950	-0.010	66667	0.1490	0.3184	72.5*	Endosulfan sulfate
6.822	-0.021	1935	7.526	-0.044	30631	0.0370	0.1368	114.9*	4,4'-DDT
7.291	0.020	10426	8.160	0.002	10862	0.4075	0.1137	112.7*	Methoxychlor
7.747	-0.019	15902	8.467	0.018	2478	0.2807	0.0119	183.8*	Endrin ketone
7.102	-0.021	1285	7.727	0.012	44859	0.0277	0.2289	156.8*	Endrin aldehyde
5.804	-0.039	15162	6.468	-0.008	121306	0.2259	0.3163	33.4	gamma-Chlordane
5.971	0.004	1049	6.616	0.001	10877	0.0162	0.0304	61.0*	alpha-Chlordane
2.212	0.002	3957	2.378	0.001	81038	0.0397	0.1625	121.5*	Hexachlorobutadiene
3.992	-0.010	38917	4.448	-0.010	43848	0.5406	0.1017	136.7*	Hexachlorobenzene
5.606	-0.021	11761	6.186	-0.017	23660	0.2168	0.0808	91.4*	Oxychlordane
----			6.408	-0.045	22241	0.0000	0.1050	---	2,4-DDE
5.926	-0.024	9915	6.546	-0.015	44363	0.1535	0.1478	3.8	trans-Nonachlor
----			6.892	-0.047	18956	0.0000	0.1172	---	2,4-DDD
6.391	-0.038	1050	----			0.0260	0.0000	---	2,4-DDT
6.561	-0.006	3961	----			0.0579	0.0000	---	cis-Nonachlor
7.409	-0.028	3473	8.406	-0.028	195894	~~0.0763~~	~~1.1288~~	174.7*	Mirex
8.732	-0.013	4361955	10.080	-0.018	14438079	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.731	-0.006	34604	1.727	-0.001	11671894	~~0.0000~~	0.0000	---	Hexachloroethane
----			7.330	-0.006	2591	~~0.0000~~	~~0.1319~~	---	Kepone
3.661	-0.009	1518299	3.998	-0.010	9688824	23.1982	24.2701	4.5	Tetrachloro-m-xylene
8.590	-0.021	1718970	9.542	-0.024	8061124	29.4874	36.3090	20.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	58.0	60.7	58.0	52-100
Decachlorobiphenyl	73.7	90.8	73.7	54-100

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

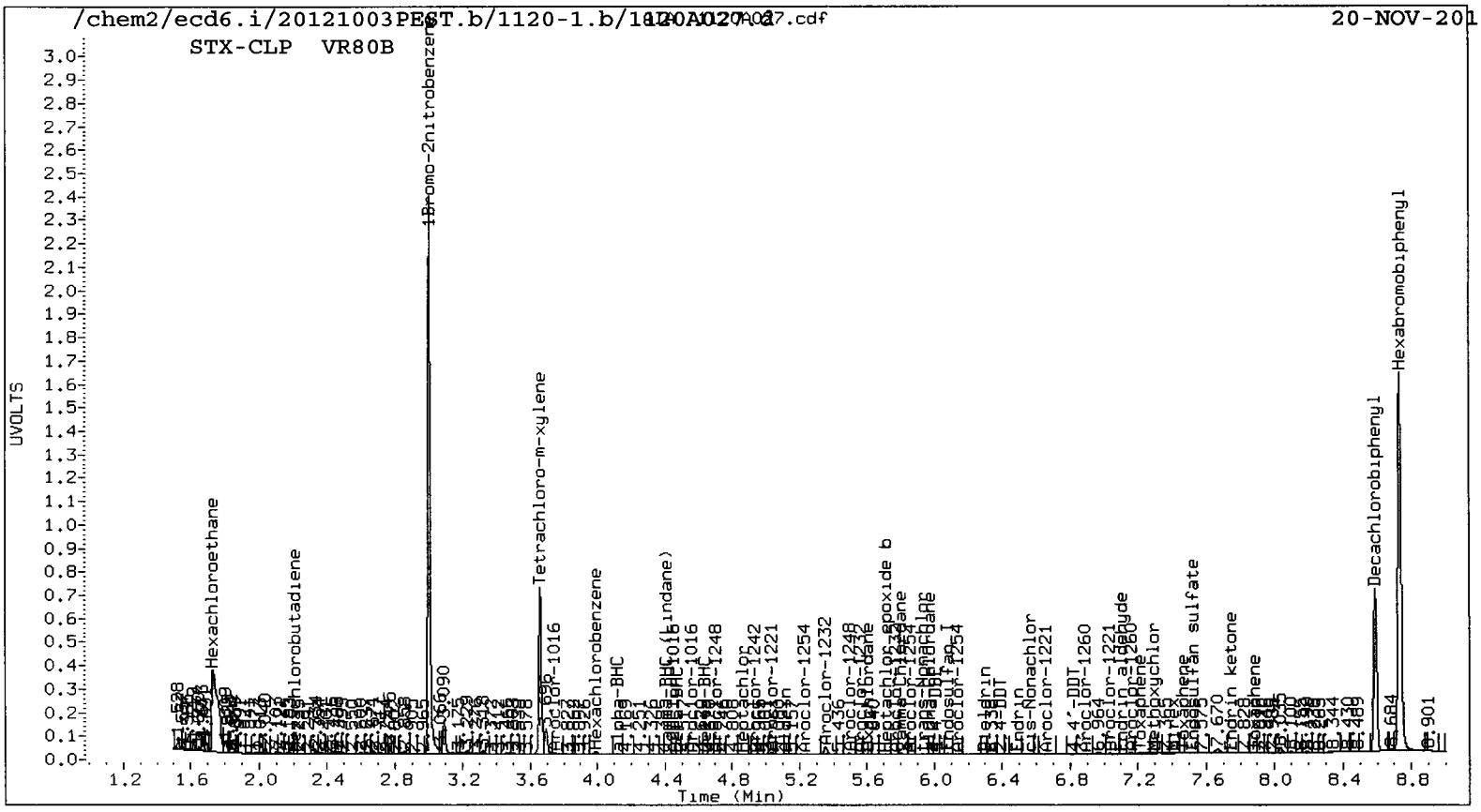
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4417029	8.8
Hexabromobiphenyl	3748709	4361955	16.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	22967986	9.2
Hexabromobiphenyl	14864285	14438079	-2.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col				CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.491	0.001	1610	1.6	1	7.124	-0.035	11855	1.7
Toxaphene	2	6.822	-0.022	1935	1.5	2	7.489	0.007	23468	2.3
Toxaphene	3	7.215	0.003	10254	9.5	3	7.727	0.014	44859	4.0
Toxaphene	4	7.465	0.000	1501	1.1	4	8.189	0.010	4546	0.6
Toxaphene	5	7.747	0.003	15902	14.1	5	8.536	0.010	28739	8.3
Toxaphene	6	7.880	0.006	5144	6.7	NS	---			----
Total STX-CLPAve (6 peaks): 5.748						Total CLP2Ave (5 peaks): 3.378			RPD = 52*	
Corrected Ave (5 peaks): 4.079						Corrected Ave (4 peaks): 2.137			RPD = 62*	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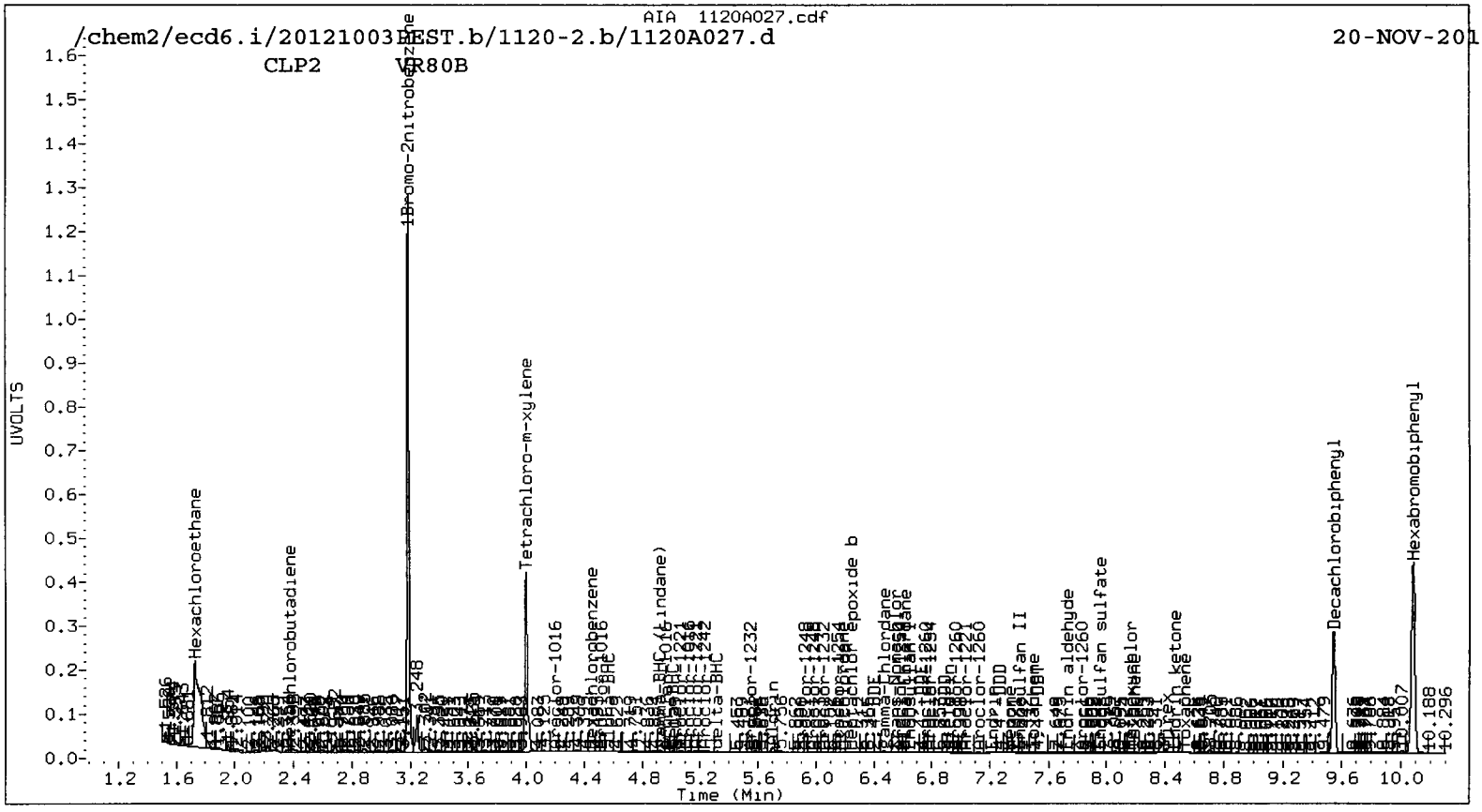
20-NOV-201
STX-CLP VR80B
UVOLTS
Time (Min)
Hexachloroethane
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
Decachlorobiphenyl
Hexabromobiphenyl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20-NOV-201
CLP2 VR80B
UVOLTS
Time (Min)
Hexachloroethane
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 11/21/12

Data file 1: /chem2/ecd6.i/20121003PEST.b/1120-1.b/1120A028.d ARI ID: VR80C
Data file 2: /chem2/ecd6.i/20121003PEST.b/1120-2.b/1120A028.d Client ID: HT-04-W-C-dup-12110
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 20-NOV-2012 19:41
Compound Sublist: wpest Report Date: 11/21/2012 10:58
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.002	-0.008	4588525	3.184	-0.006	23600683	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.120	-0.027	6266	4.570	-0.015	30084	~~0.0733~~	~~0.0584~~	22.5	alpha-BHC
4.477	-0.020	2551	5.009	0.002	17524	0.0706	0.0841	17.5	beta-BHC
4.642	-0.020	2940	5.315	0.001	44213	0.0427	0.1083	86.9*	delta-BHC
4.408	-0.016	8571	4.923	-0.014	80563	0.1091	0.1731	45.4*	gamma-BHC (Lindane)
4.865	0.003	4502	----			0.0632	0.0000	---	Heptachlor
5.157	0.009	2615	5.703	-0.032	306841	0.0359	0.7323	181.3*	Aldrin
5.709	-0.014	4139	6.320	0.027	22351	0.0590	0.0592	0.2	Heptachlor epoxide b
6.082	-0.017	10483	6.644	-0.036	76862	0.1615	0.2266	33.5	Endosulfan I
6.302	-0.021	1241	6.916	-0.023	15996	0.0185	0.0446	82.7*	Dieldrin
6.011	-0.016	2332	6.730	-0.016	17609	0.0377	0.0515	31.0	4,4'-DDE
6.494	-0.046	1573	7.217	-0.011	17826	0.0252	0.0684	92.4*	Endrin
----			7.404	-0.013	4025	0.0000	0.0155	---	Endosulfan II
----			7.266	-0.017	6621	0.0000	0.0269	---	4,4'-DDD
7.513	0.000	7609	7.951	-0.010	67964	0.1499	0.3104	69.7*	Endosulfan sulfate
6.825	-0.018	1362	7.564	-0.007	3988	0.0248	0.0170	37.3	4,4'-DDT
7.290	0.019	11162	8.159	0.001	6200	0.4164	0.0621	148.1*	Methoxychlor
7.747	-0.019	16871	8.461	0.013	2940	0.2842	0.0134	181.9*	Endrin ketone
7.161	0.037	3774	7.727	0.012	42069	0.0776	0.2052	90.3*	Endrin aldehyde
5.804	-0.038	12743	6.468	-0.008	95465	0.1828	0.2423	28.0	gamma-Chlordane
5.975	0.008	1284	6.612	-0.003	6391	0.0191	0.0174	9.2	alpha-Chlordane
2.215	0.005	3760	2.377	0.000	33199	0.0363	0.0648	56.4*	Hexachlorobutadiene
3.991	-0.011	28481	4.447	-0.011	13750	0.3809	0.0310	169.9*	Hexachlorobenzene
5.607	-0.021	11082	6.186	-0.017	17788	0.1950	0.0591	107.0*	Oxychlordane
----			6.420	-0.033	13092	0.0000	0.0602	---	2,4-DDE
5.926	-0.024	10435	6.545	-0.016	39369	0.1542	0.1254	20.6	trans-Nonachlor
6.184	-0.006	1446	6.893	-0.046	13905	0.0386	0.0822	72.1*	2,4-DDD
6.390	-0.038	1124	----			0.0265	0.0000	---	2,4-DDT
6.560	-0.006	4817	----			0.0672	0.0000	---	cis-Nonachlor
7.407	-0.030	3095	8.406	-0.028	115540	~~0.0648~~	~~0.6366~~	163.0*	Mirex
8.732	-0.013	4570793	10.080	-0.018	15099149	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.731	-0.006	40341	1.727	-0.001	12979567	~~0.0000~~	~~0.0000~~	---	Hexachloroethane
----			7.332	-0.004	3812	~~0.0000~~	~~0.1856~~	---	Kepone
3.661	-0.010	1570561	3.998	-0.010	10016726	23.0999	24.4188	5.6	Tetrachloro-m-xylen
8.590	-0.021	1774787	9.542	-0.024	8314737	29.0539	35.8116	20.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	57.7	61.0	57.7	52-100
Decachlorobiphenyl	72.6	89.5	72.6	54-100

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

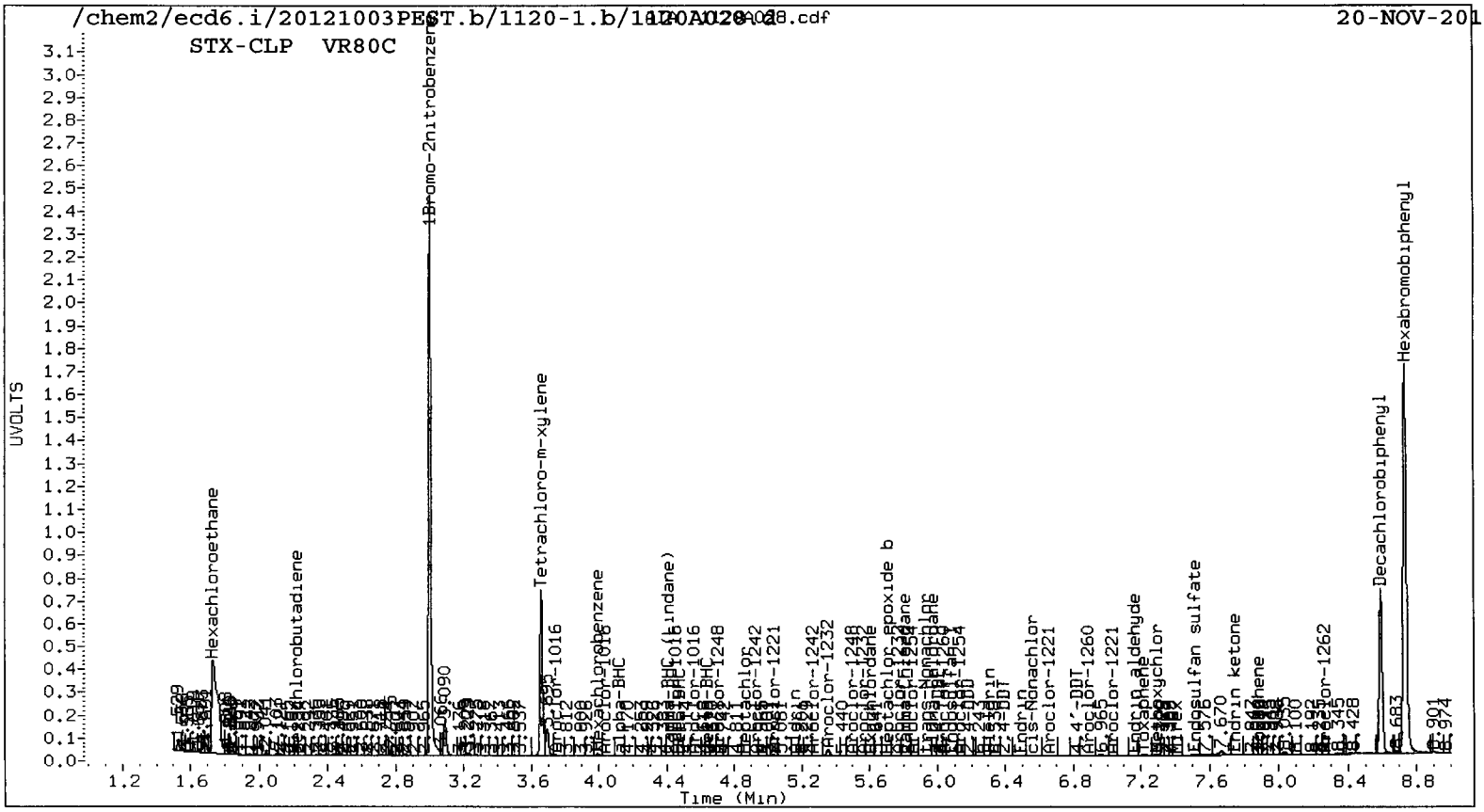
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4588525	13.0
Hexabromobiphenyl	3748709	4570793	21.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	23600683	12.2
Hexabromobiphenyl	14864285	15099149	1.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col				CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	6.494	0.004	1573	1.5	1	7.123	-0.035	12552	1.7
Toxaphene	2	6.825	-0.019	1362	1.0	2	7.490	0.007	19328	1.8
Toxaphene	3	7.216	0.003	11174	9.9	3	7.727	0.014	42069	3.6
Toxaphene	4	7.513	0.048	7609	5.5	4	8.194	0.014	6489	0.8
Toxaphene	5	7.747	0.002	16871	14.3	5	8.534	0.008	31709	8.8
Toxaphene	6	7.880	0.006	4750	5.9	NS	---			----
Total STX-CLPAve (6 peaks): 6.339						Total CLP2Ave (5 peaks): 3.338				RPD = 62*
Corrected Ave (5 peaks): 4.753						Corrected Ave (4 peaks): 1.971				RPD = 83*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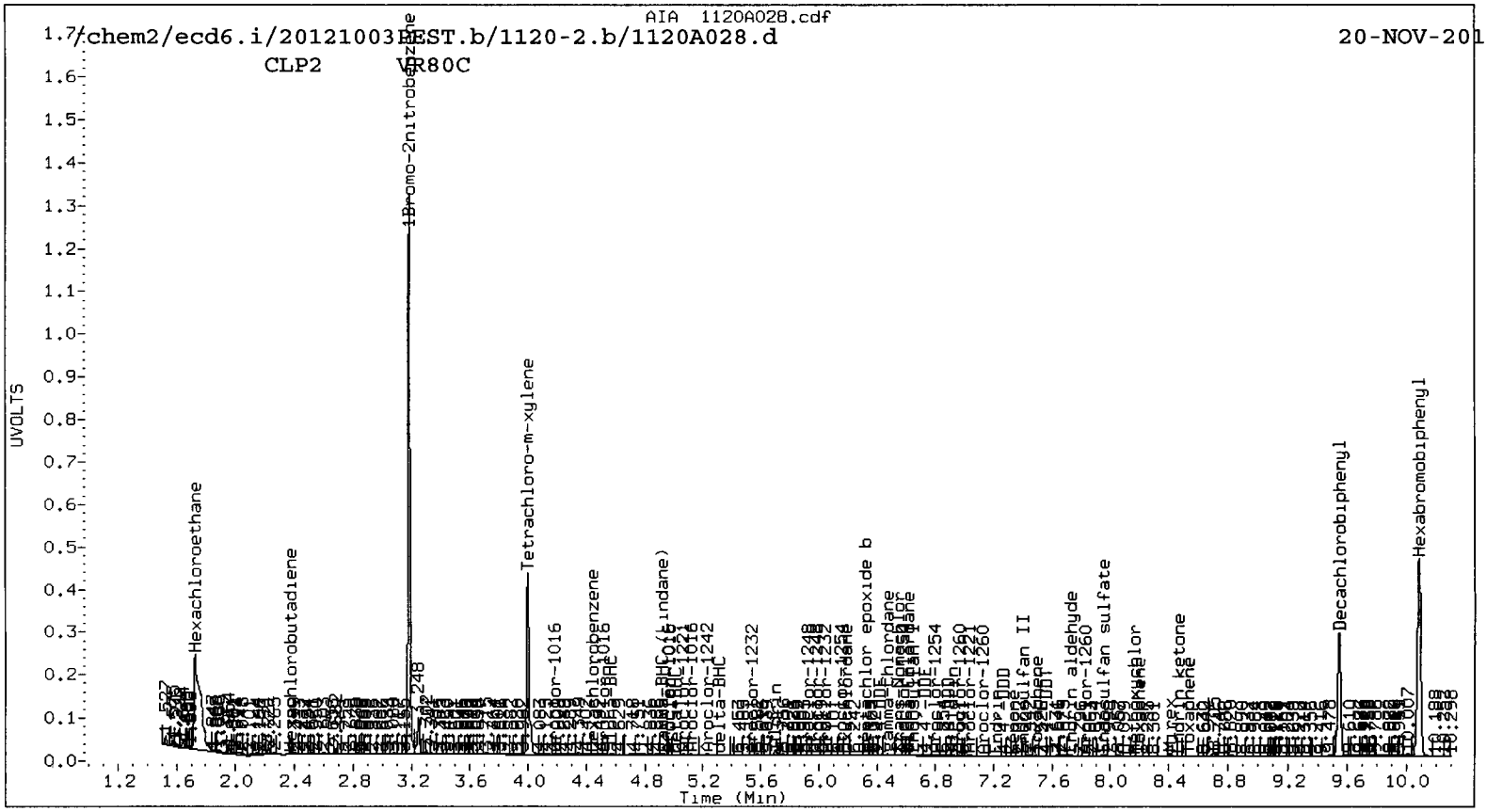
20-NOV-201
STX-CLP VR80C
UVOLTS
Time (Min)
Hexachloroethane
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
Decachlorobiphenyl
Hexabromobiphenyl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20-NOV-201
CLP2 VR80C
UVOLTS
Time (Min)
Hexachloroethane
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

YZ 11/21/12

Data file 1: /chem2/ecd6.i/20121003PEST.b/1120-1.b/1120A029.d ARI ID: VR80D
Data file 2: /chem2/ecd6.i/20121003PEST.b/1120-2.b/1120A029.d Client ID: WS-10-W-C-121107
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 20-NOV-2012 19:59
Compound Sublist: wpest Report Date: 11/21/2012 10:59
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.002	-0.008	4563501	3.184	-0.006	23769798	80.0000	80.0000 IS	0.0	1Bromo-2nitrobenzen
4.120	-0.028	4337	4.573	-0.013	15889	~~0.0510~~	~~0.0306~~	49.9*	alpha-BHC
4.477	-0.021	2675	5.010	0.003	34526	0.0744	0.1645	75.4*	beta-BHC
4.642	-0.021	6668	5.314	0.000	112549	0.0973	0.2736	95.1*	delta-BHC
4.408	-0.017	4724	4.922	-0.014	84256	0.0605	0.1797	99.3*	gamma-BHC (Lindane)
4.865	0.003	2827	5.428	0.031	31422	0.0309	0.0732	58.9*	Heptachlor
5.156	0.008	1899	5.702	-0.033	375023	0.0262	0.8886	188.5*	Aldrin
5.709	-0.014	4483	6.272	-0.021	53784	0.0643	0.1414	75.0*	Heptachlor epoxide b
6.081	-0.018	5562	6.643	-0.038	65375	0.0862	0.1914	75.8*	Endosulfan I
6.299	-0.024	1032	6.916	-0.023	23169	0.0155	0.0641	122.2*	Dieldrin
6.009	-0.018	2659	6.731	-0.015	15265	0.0432	0.0443	2.6	4,4'-DDE
----			----			0.0000	0.0000	---	Endrin
6.729	-0.017	1197	7.403	-0.013	10708	0.0203	0.0415	68.3*	Endosulfan II
6.620	0.036	2787	7.263	-0.020	4424	0.0524	0.0181	97.2*	4,4'-DDD
7.512	-0.002	9133	7.949	-0.011	174032	0.1845	0.8015	125.2*	Endosulfan sulfate
6.824	-0.018	6371	7.556	-0.015	23243	0.1191	0.1001	17.3	4,4'-DDT
7.289	0.018	13723	8.169	0.011	96007	0.5248	0.9692	59.5*	Methoxychlor
7.748	-0.019	17487	----			0.3020	0.0000	---	Endrin ketone
7.102	-0.021	4126	7.725	0.010	137775	0.0870	0.6778	154.5*	Endrin aldehyde
5.851	0.009	2812	6.466	-0.010	125803	0.0406	0.3170	154.6*	gamma-Chlordane
----			6.612	-0.003	11377	0.0000	0.0307	---	alpha-Chlordane
2.213	0.003	3687	2.377	0.000	39465	0.0358	0.0765	72.5*	Hexachlorobutadiene
3.991	-0.011	28705	4.444	-0.014	4699	0.3860	0.0105	189.4*	Hexachlorobenzene
5.606	-0.021	8940	6.189	-0.014	31182	0.1613	0.1029	44.2*	Oxychlordane
----			6.404	-0.049	31139	0.0000	0.1421	---	2,4-DDE
5.930	-0.021	11198	6.543	-0.018	43403	0.1696	0.1394	19.5	trans-Nonachlor
----			6.896	-0.043	14994	0.0000	0.0894	---	2,4-DDD
----			7.214	-0.013	19723	0.0000	0.1078	---	2,4-DDT
6.560	-0.006	3068	----			0.0439	0.0000	---	cis-Nonachlor
7.423	-0.014	4220	8.406	-0.028	124434	~~0.0907~~	~~0.6914~~	153.6*	Mirex
8.732	-0.014	4458277	10.080	-0.018	14973584	80.0000	80.0000 IS	0.0	Hexabromobiphenyl
1.731	-0.006	25702	1.727	-0.001	10385791	~~0.0000~~	0.0000	---	Hexachloroethane
----			7.328	-0.008	2795	~~0.0000~~	0.1372	---	Kepone
3.660	-0.010	1546319	3.997	-0.010	10042497	22.8680	24.3074	6.1	Tetrachloro-m-xylen
8.590	-0.021	1738283	9.543	-0.023	7700421	29.1745	33.4439	13.6	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	57.2	60.8	57.2	52-100
Decachlorobiphenyl	72.9	83.6	72.9	54-100

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

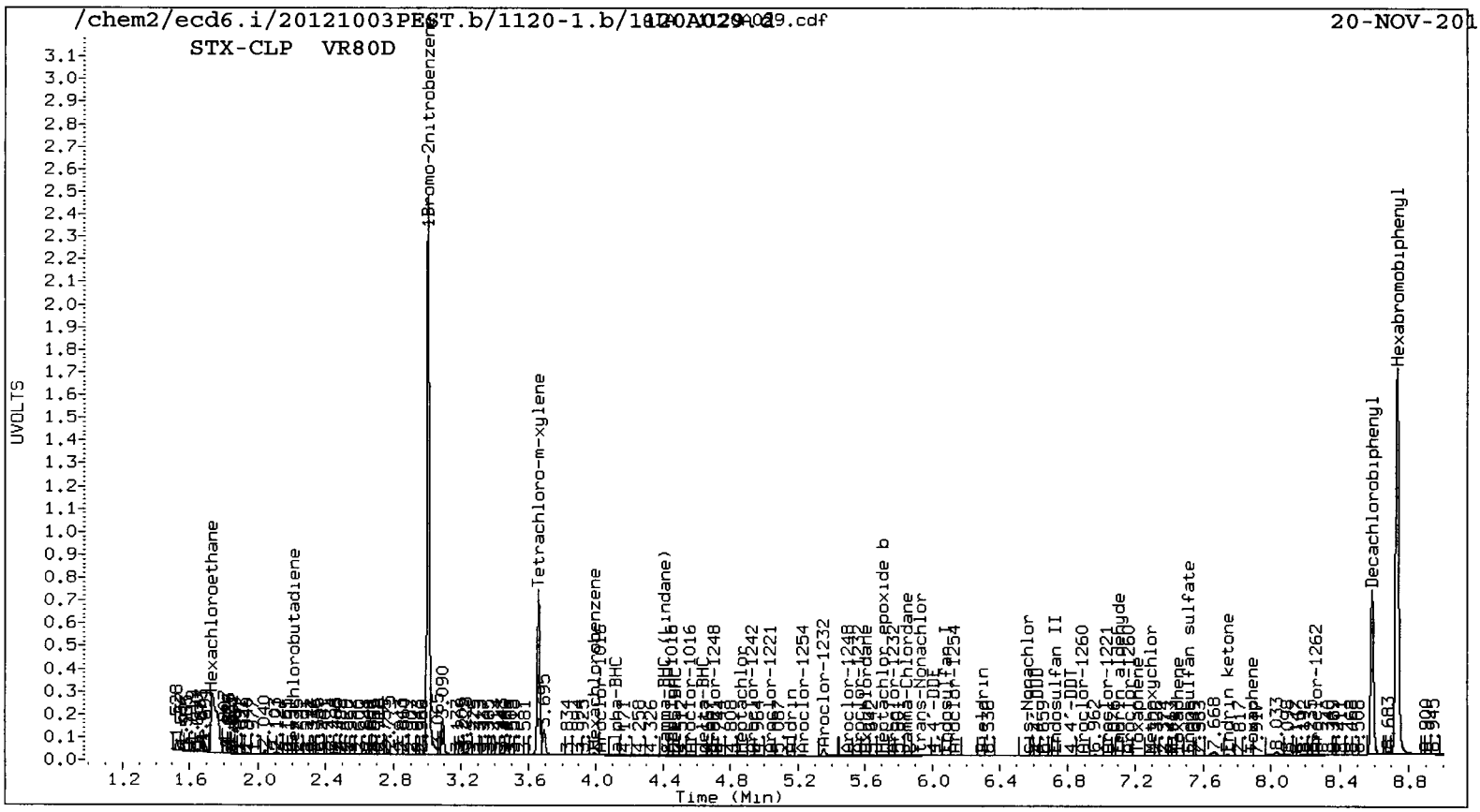
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4563501	12.4
Hexabromobiphenyl	3748709	4458277	18.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	23769798	13.0
Hexabromobiphenyl	14864285	14973584	0.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col				CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount
Toxaphene	1	---			0.000	1	7.173	0.015	4535	0.6
Toxaphene	2	6.824	-0.020	6371	4.7	2	7.482	-0.001	33491	3.1
Toxaphene	3	7.214	0.002	13861	12.6	3	7.725	0.012	137775	11.9
Toxaphene	4	7.454	-0.012	5372	4.0	4	8.169	-0.011	96007	12.0
Toxaphene	5	7.748	0.003	17487	15.2	5	8.543	0.016	18189	5.1
Toxaphene	6	7.887	0.013	15937	20.2	NS	---			----
Total STX-CLPAve (5 peaks): 11.324						Total CLP2Ave (5 peaks): 6.549				RPD = 53*
~ Corrected Ave (4 peaks): 9.109						Corrected Ave (3 peaks): 2.945				RPD = 102*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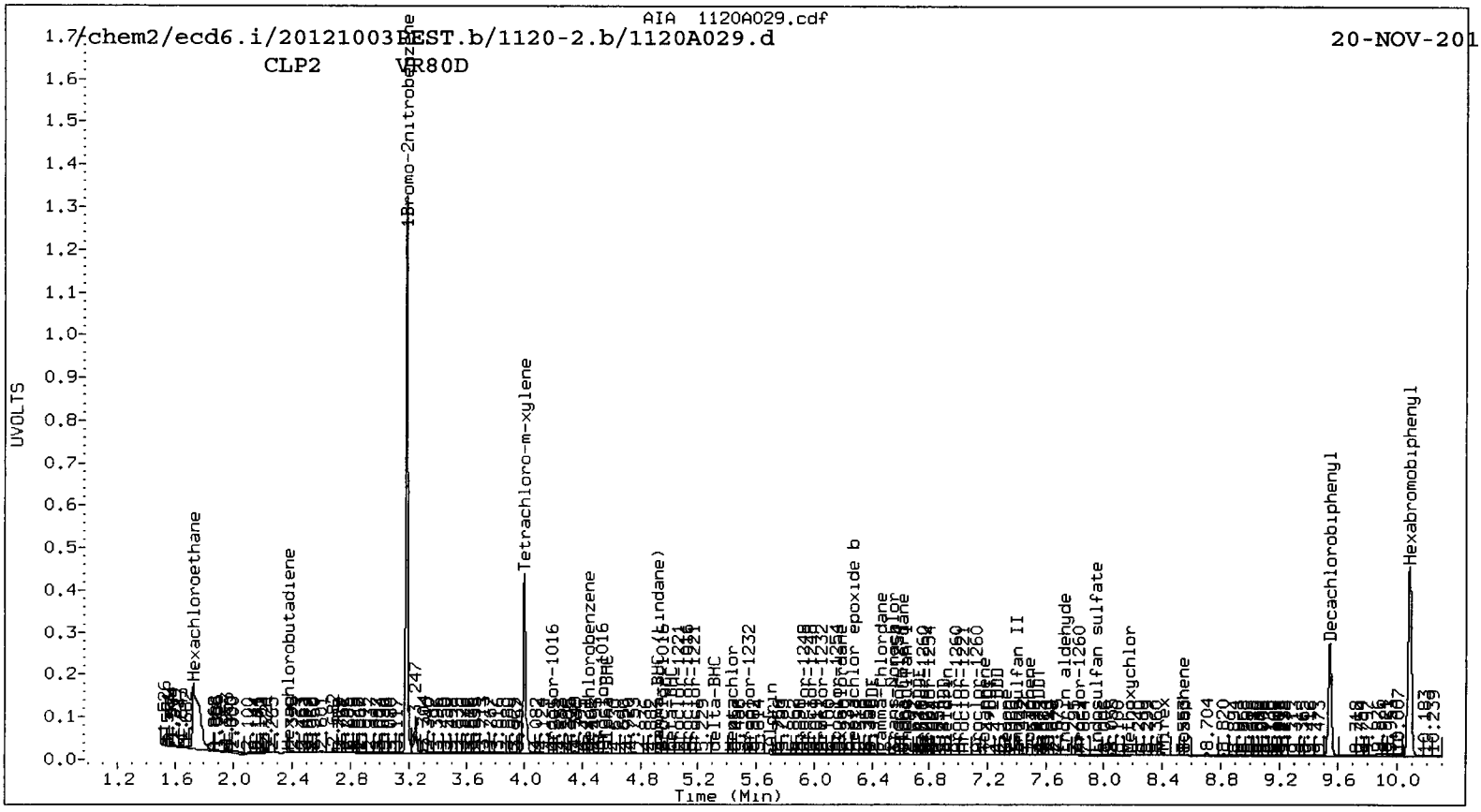
STX-CLP VR80D
UVOLTS
Time (Min)
1-Bromo-2nitrobenzene
Hexachloroethane
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
Decachlorobiphenyl
Hexabromobiphenyl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20-NOV-201
CLP2 VR80D
UVOLTS
Time (Min)
1-Bromo-2nitrobenzene
Hexachloroethane
Hexachlorobutadiene
Tetrachloro-m-xylene
Hexachlorobenzene
Decachlorobiphenyl
Hexabromobiphenyl

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

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Data file 2: /chem2/ecd6.i/20121003PEST.b/1120-2.b/1120A031.d Client ID:
Method: /chem2/ecd6.i/20121003PEST.b/PEST1003.m Injection Date: 20-NOV-2012 20:34
Compound Sublist: INDA Report Date: 11/21/2012 12:32
Instrument, Inj. Vol.: ecd6.i, 1ul Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.003	-0.007	4356127	3.184	-0.006	23550420	80.0000	80.0000	0.0	1Bromo-2nitrobenzen
4.134	-0.013	1754151	4.571	-0.014	10391408	21.6078	20.2263	6.6	alpha-BHC
4.497	0.000	685544	5.000	-0.007	3866291	19.9772	18.5939	7.2	beta-BHC
4.661	-0.002	1399539	5.305	-0.009	8014997	21.3873	19.6663	8.4	delta-BHC
4.411	-0.013	1532382	4.923	-0.014	9053312	20.5458	19.4929	5.3	gamma-BHC (Lindane)
4.845	-0.016	1376740	5.380	-0.017	8126753	20.3590	19.1116	6.3	Heptachlor
5.130	-0.018	1445319	5.718	-0.018	8289687	20.9289	19.8256	5.4	Aldrin
5.703	-0.020	1340339	6.275	-0.018	7185628	20.1345	19.0635	5.5	Heptachlor epoxide b
6.079	-0.020	1336071	6.662	-0.018	6455621	21.6879	19.0724	12.8	Endosulfan I
6.301	-0.021	2662172	6.920	-0.019	13398627	41.8062	37.4191	11.1	Dieldrin
6.014	-0.014	2391538	6.730	-0.015	13048777	40.6759	38.2198	6.2	4,4'-DDE
6.519	-0.021	2093218	7.209	-0.019	9659447	36.6060	39.6336	7.9	Endrin
6.727	-0.019	2184459	7.400	-0.017	10568182	39.5603	43.3810	9.2	Endosulfan II
6.570	-0.014	2070214	7.269	-0.014	10341022	41.4618	44.9270	8.0	4,4'-DDD
7.492	-0.021	1821563	7.943	-0.017	8495265	39.1922	41.4714	5.7	Endosulfan sulfate
6.826	-0.016	1839736	7.555	-0.015	8256877	36.6452	37.6955	2.8	4,4'-DDT
7.255	-0.016	4249463	8.141	-0.018	16258230	173.1276	173.9740	0.5	Methoxychlor
7.746	-0.021	2517612	8.430	-0.018	10079140	46.3207	49.2568	6.1	Endrin ketone
7.103	-0.020	1726317	7.697	-0.017	8192806	38.7667	42.7193	9.7	Endrin aldehyde
5.826	-0.017	1357372	6.459	-0.017	7214596	20.5062	18.3474	11.1	gamma-Chlordane
5.949	-0.019	1282692	6.597	-0.018	6685591	20.0789	18.2354	9.6	alpha-Chlordane
2.200	-0.010	2193128	2.367	-0.010	9963220	22.2911	19.4858	13.4	Hexachlorobutadiene
3.996	-0.006	1498782	4.450	-0.008	11106823	21.1124	25.1228	17.3	Hexachlorobenzene
8.738	-0.008	4185014	10.083	-0.015	14126548	80.0000	80.0000	0.0	Hexabromobiphenyl
3.662	-0.009	2404716	3.998	-0.010	16370194	37.2555	39.9925	7.1	Tetrachloro-m-xylen
8.592	-0.018	2180442	9.544	-0.022	10274012	38.9850	47.2968	19.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

SURROGATE/SPIKE PERCENT RECOVERY

SURR/SPIKE	Col1	Col2	Lower	Limits
Tetrachloro-m-xylene	93.1	100.0	93.1~	115- 0
Decachlorobiphenyl	97.5	118.2	97.5~	115- 0

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

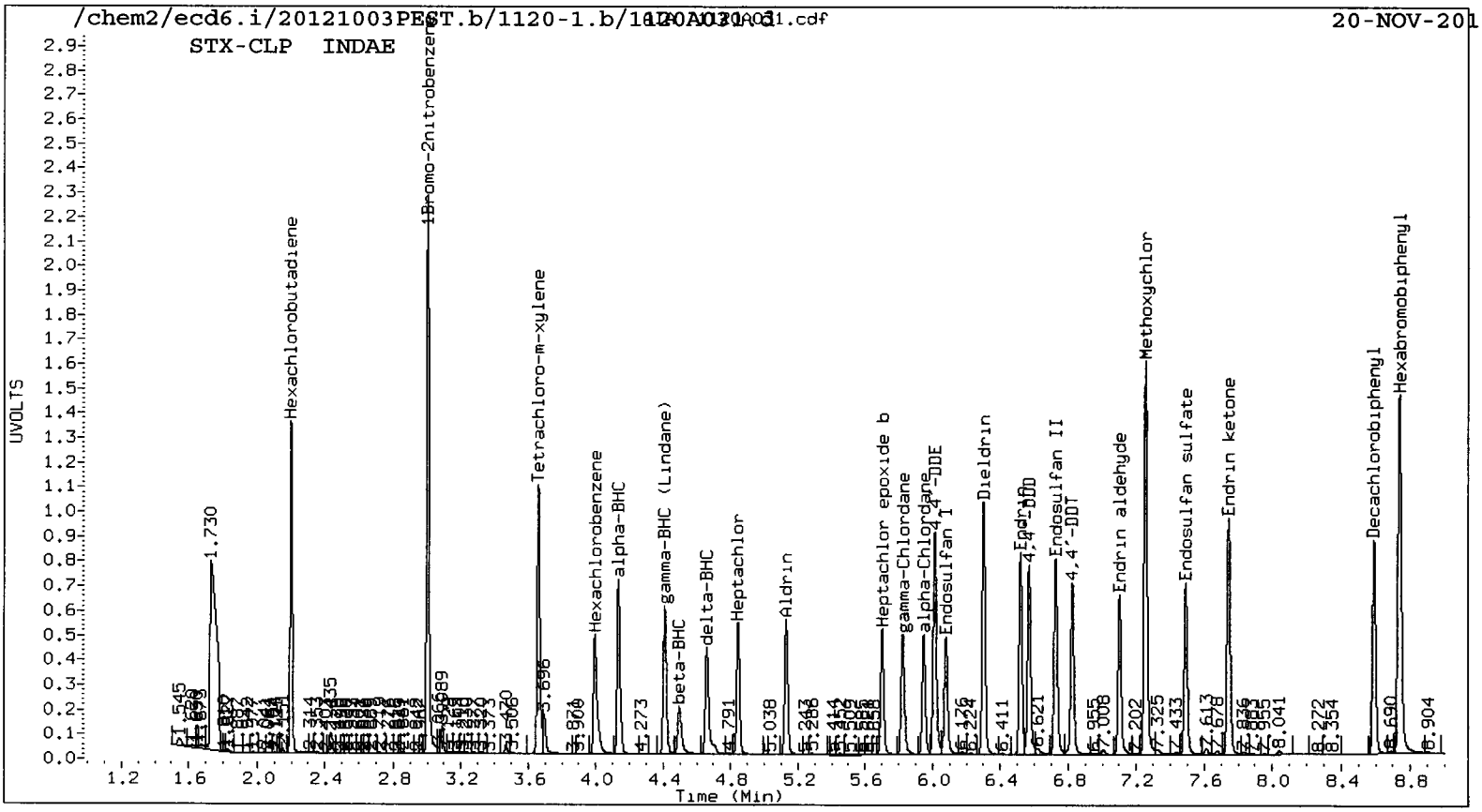
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	4060064	4356127	7.3
Hexabromobiphenyl	3748709	4185014	11.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	21032891	23550420	12.0
Hexabromobiphenyl	14864285	14126548	-5.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 03-OCT-2012
<- Indicates standard response outside Limits (-50 to +100%)

	STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount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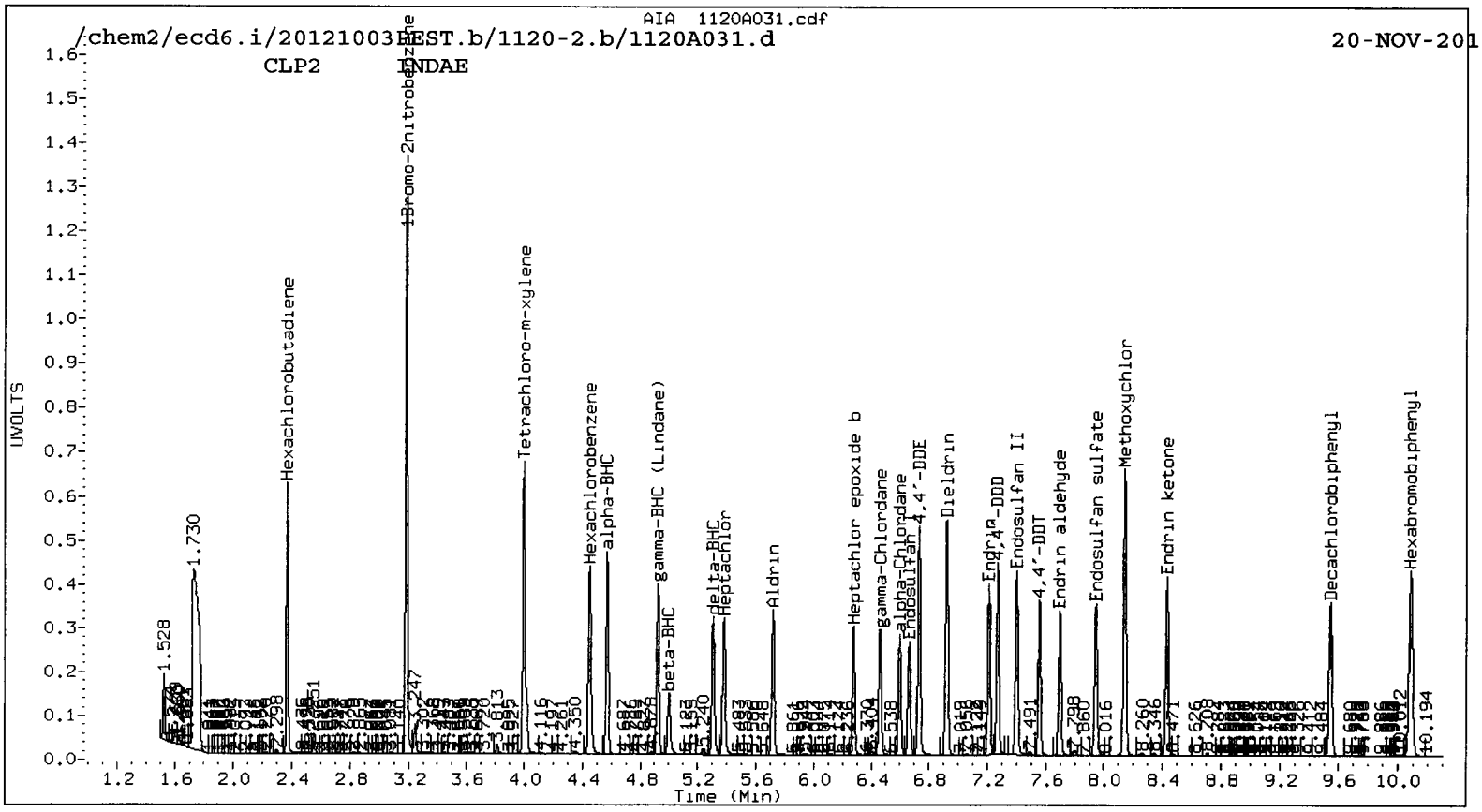
20-NOV-201
STX-CLP INDAE
UVOLTS
Time (Min)
Hexachlorobutadiene
1.730
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
3.696
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Endosulfan I
Dieldrin
Endrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Methoxychlor
Endosulfan sulfate
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl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UVOLTS
Time (Min)
1.528
1.730
Hexachlorobutadiene
1Bromo-2nitrobenzene
Tetrachloro-m-xylene
Hexachlorobenzene
alpha-BHC
gamma-BHC (Lindane)
beta-BHC
delta-BHC
Heptachlor
Aldrin
Heptachlor epoxide b
gamma-Chlordane
alpha-Chlordane
4,4'-DDE
Endosulfan I
Dieldrin
4,4'-DDD
Endosulfan II
4,4'-DDT
Endrin aldehyde
Endosulfan sulfate
Methoxychlor
Endrin ketone
Decachlorobiphenyl
Hexabromobiphenyl

PCP/Chlorophenols Raw Data
Extraction Bench Sheets and Notes

ARI Job ID: VR80

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Benchsheet

8041 PCP – Low Level Water
Separatory Funnel (3510C) (SOP # 3311S)

Preparation Test PCP L-L # 2 (PCPWSL)

Low Level ~~(0.05ppb)~~ (0.025 ppb)

ARI Job No(s) VR80 Page 1 of 1 Batch set up by: _____

Bottle #	Extraction Requirements	Volume Extracted	Volume to Lab 2.5mL	Final Effective Volume	Comments	Verify Client ID
	VR80 MBW	500mL	~~10mL~~	~~10mL~~ 5mL		AR 11/14/12
	SBW	500mL	~~10mL~~	~~10mL~~ 5mL		
	SBWDup.	500mL	~~10mL~~	~~10mL~~ 5mL		
	~~QLS~~	~~500mL~~	~~10mL~~	~~10mL~~		Analyst/Date
7	VR80 A	500mL	~~10mL~~	~~10mL~~ 5mL	See Analyst note	KD 80-85°C
10	B	500mL	~~10mL~~	~~10mL~~ 5mL		Hexane Exchange (2 X 20mL) 100°C
8	C	500mL	~~10mL~~	~~10mL~~ 5mL		YC 11/14/12
8	D	500mL	~~10mL~~	~~10mL~~ 5mL		Analyst/Date
		500mL	10mL	10mL		TurboVap (1) 2 3
		500mL	10mL	10mL		RR 11/17/12
		500mL	10mL	10mL		Analyst/Date
		500mL	10mL	10mL		Derivitize by GC
		500mL	10mL	10mL		YZ 11/20/12
		500mL	10mL	10mL		Analyst/Date
		500mL	10mL	10mL		
		500mL	10mL	10mL		
		500mL	10mL	10mL		
		500mL	10mL	10mL		
		500mL	10mL	10mL		
		500mL	10mL	10mL		
		500mL	10mL	10mL		
		500mL	10mL	10mL		
		500mL	10mL	10mL		
		500mL	10mL	10mL		
		500mL	10mL	10mL		
		500mL	10mL	10mL		
		500mL	10mL	10mL		
Analyst/Date	AR 11/14/12		RR 11/17/12			

Standard	Standard ID	Concentration	Volume	Expiration Date	Analyst	Witness
Surrogate V	F (1925-2)	12.5µg/mL	~~20µL~~ 10µL	12/9/12	AR	~~SH~~
QLS Spike	16 (2033-1)	12.5µg/mL	~~20µL~~ 5µL	10/18/13	AR	~~SH~~
~~QLS Spike~~	16 ( )	~~2.5µg/mL~~	~~10µL~~			
Extraction Time: 8:05			Diazald ID:			

SPECIAL INSTRUCTIONS: 1. Add surr/spike. 2. Acidify all with 1:1 Sulfuric Acid 3. Extract 3X with 30mL DCM.

4. KD (NO Drying Column) at 80° to 5mL. 5. Exchange (2 X with 20mL) Hexane at 100°. 6. Turbo Vap.

7. Vial at ~~10mL~~ 2.5mL into Herb Tubes using Hexane. 8. GC Analyst to Derivitize.

A. Archive (Y) N

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory
Analyst Notes

ARI Job No.: VR80

Client ID: Anchor QEA, LLC

Parameter: Low level PCP

Client Project: City of Kenmore

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☐ No Anomalies (standard soil/wet sediment/sand/gravel)=	
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☑ Turbid/Color= VR80 Sample A,B,C,D light tan, clear	AK 11/14/12
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☑ Emulsions (%)= VR80 Samples A-C 50% emulsion, used centrifuge, breakup emulsion with Latex gloved fingers	AK 11/14/12
☐ Other (Details)=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
(Centrifuge#1 used for all Centrifugations)	

PCP/Chlorophenols Raw Data
Initial Calibration

ARI Job ID: VR80

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Initial Calibration Notes

ARI SOP: **403S**(PCB) **405S**(Herb) **407S**(TPH-D) **409S**(HCID) **412S**(PCP) **423S**(Pest)
427S(Dir Inj) **428S**(EPH) **Other**

Instrument: FID-3A ~~FID-3B~~ FID-4A FID-4B FID-5 FID-7 FID-8
FID-9 ECD-1 ECD-5 ECD-6 ECD-7 ECD-8

Curve Date(s): 9/21/2012 Internal Standard ID NA Expiration NA

Endrin/DDT Breakdown <15%? YES / NO / NA
ICal Meets %RSD & r^2 Criteria YES / NO
Manual Integrations for ICal? YES / NO
Minimum Response S/N Met YES / NO

ICV Exceeding ±20%? YES / NO
ICV Exceeding ±30%? YES / NO
Linear Fits Used? YES / NO
Quadratic Fits Used? YES / NO
Calibration Points Dropped? YES / NO

Primary Source	Standard #	Expiration	Secondary Source	Standard #	Expiration
AccuStandard	~~1919-3~~ 9/25/12 AR 1919-3	10/15/2012		1957-2	6/18/2013

Detail problems, corrective actions and/or other pertinent information below:

Analyst: _____ **Date:** 9/25/2012

Reviewer: _____ **Date:** 9/26/12

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd1.i/PCP20120921.b/ical-2.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	21-SEP-2012 19:28	0921A017.d	1	PCP D	
2	21-SEP-2012 20:04	0921A018.d	1	PCP A	
3	21-SEP-2012 20:41	0921A019.d	1	PCP B	
4	21-SEP-2012 21:17	0921A020.d	1	PCP C	
5	21-SEP-2012 21:53	0921A021.d	1	PCP E	
6	21-SEP-2012 22:30	0921A022.d	1	PCP F	
7	21-SEP-2012 23:06	0921A023.d	1	PCP ICV	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecd1.i/PCP20120921.b/ical-1.b

ARI Job No.: PCP Method: PCP.m Instrument: ecd1.i Date: 21-SEP-2012

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1928	0921A017.d	PCP D		1	NO MANUAL INTEGRATION
2004	0921A018.d	PCP A		1	NO MANUAL INTEGRATION
2041	0921A019.d	PCP B		1	NO MANUAL INTEGRATION
2117	0921A020.d	PCP C		1	NO MANUAL INTEGRATION
2153	0921A021.d	PCP E		1	NO MANUAL INTEGRATION
2230	0921A022.d	PCP F		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - /chem2/ecd1.i/PCP20120921.b/ical-2.b

ARI Job No.: PCP Method: PCPB.m Instrument: ecd1.i Date: 21-SEP-2012

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1928	0921A017.d	PCP D		1	NO MANUAL INTEGRATION
2004	0921A018.d	PCP A		1	NO MANUAL INTEGRATION
2041	0921A019.d	PCP B		1	NO MANUAL INTEGRATION
2117	0921A020.d	PCP C		1	NO MANUAL INTEGRATION
2153	0921A021.d	PCP E		1	NO MANUAL INTEGRATION
2230	0921A022.d	PCP F		1	NO MANUAL INTEGRATION
2306	0921A023.d	PCP ICV		1	NO MANUAL INTEGRATION

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd1.i/PCP20120921.b/PCPB.m
Batch File: /chem2/ecd1.i/PCP20120921.b/ical-2.b
Inst ID: ecd1.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	0921A017	0921A018	0921A019	0921A020	0921A021	0921A022	0921A023
INJ.DATE:	21-SEP-2012	21-SEP-2012	21-SEP-2012	21-SEP-2012	21-SEP-2012	21-SEP-2012	21-SEP-2012
INJ.TIME:	19:28	20:04	20:41	21:17	21:53	22:30	23:06

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1	2,4-Dichlorophenol	13.778	13.787	13.782	13.780	13.775	13.773	13.779	13.778	13.708-13.848	13.779	0.005
2	2,4,6-Trichlorophenol	14.264	14.268	14.266	14.265	14.261	14.259	14.264	14.264	14.194-14.334	14.264	0.003
3	2,3,6-Trichlorophenol	15.507	15.514	15.510	15.508	15.504	15.502	15.510	15.507	15.437-15.577	15.508	0.004
4	2,4,5-Trichlorophenol	17.423	17.448	17.434	17.427	17.418	17.414	17.433	17.423	17.353-17.493	17.428	0.012
5	2,3,5,6-Tetrachlorophe	18.752	18.767	18.759	18.754	18.748	18.746	18.759	18.752	18.682-18.822	18.755	0.007
6	2,3,4-Trichlorophenol	18.968	19.001	18.984	18.974	18.961	18.957	18.982	18.968	18.898-19.038	18.975	0.015
$ 7	2,4,6-Tribromophenol (	20.867	20.887	20.877	20.870	20.863	20.861	20.878	20.867	20.797-20.937	20.872	0.009
8	2,3,4,5-Tetrachlorophe	22.012	22.044	22.029	22.019	22.006	22.003	22.024	22.012	21.942-22.082	22.020	0.014
9	Pentachlorophenol	22.888	22.906	22.897	22.892	22.884	22.882	22.896	22.888	22.818-22.958	22.892	0.008

Reviewer 1 _____ Date: 9/26/2012
Reviewer 2 _____ Date: 9/26/12

Analytical Resources, Inc.
RETENTION TIME SUMMARY REPORT

Method File: /chem2/ecd1.i/PCP20120921.b/PCP.m
Batch File: /chem2/ecd1.i/PCP20120921.b/ical-1.b
Inst ID: ecd1.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	0921A017	0921A018	0921A019	0921A020	0921A021	0921A022
INJ.DATE:	21-SEP-2012	21-SEP-2012	21-SEP-2012	21-SEP-2012	21-SEP-2012	21-SEP-2012
INJ.TIME:	19:28	20:04	20:41	21:17	21:53	22:30

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1	2,4-Dichlorophenol	12.711	12.719	12.716	12.713	12.707	12.706	12.711	12.641-12.781	12.712	0.005
2	2,4,6-Trichlorophenol	13.256	13.260	13.257	13.256	13.254	13.252	13.256	13.186-13.326	13.256	0.003
3	2,3,6-Trichlorophenol	14.254	14.262	14.258	14.256	14.251	14.249	14.254	14.184-14.324	14.255	0.005
4	2,4,5-Trichlorophenol	16.010	16.044	16.025	16.015	16.003	15.999	16.010	15.940-16.080	16.016	0.016
5	2,3,5,6-Tetrachlorophe	17.315	17.334	17.323	17.318	17.311	17.307	17.315	17.245-17.385	17.318	0.009
6	2,3,4-Trichlorophenol	17.519	17.566	17.541	17.527	17.511	17.506	17.519	17.449-17.589	17.528	0.022
$ 7	2,4,6-Tribromophenol (	18.763	18.793	18.776	18.768	18.757	18.753	18.763	18.693-18.833	18.768	0.014
8	2,3,4,5-Tetrachlorophe	20.323	20.368	20.346	20.331	20.314	20.308	20.323	20.253-20.393	20.332	0.022
9	Pentachlorophenol	21.158	21.182	21.170	21.163	21.153	21.149	21.158	21.088-21.228	21.162	0.012

Reviewer 1 AR Date: 9/26/2012
Reviewer 2 _____ Date: 9/26/12

SDG 13513

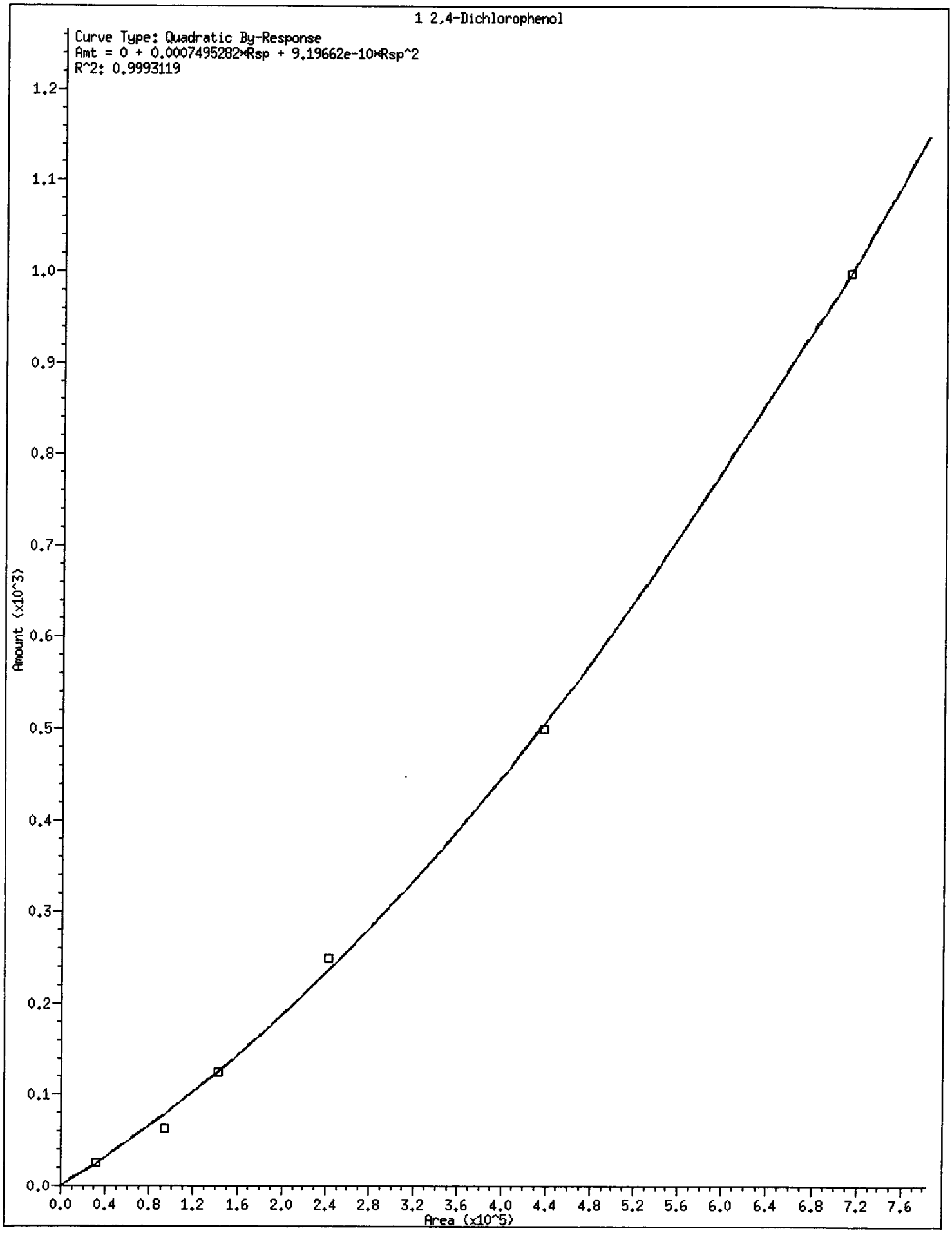
Analytical Resources, Inc.

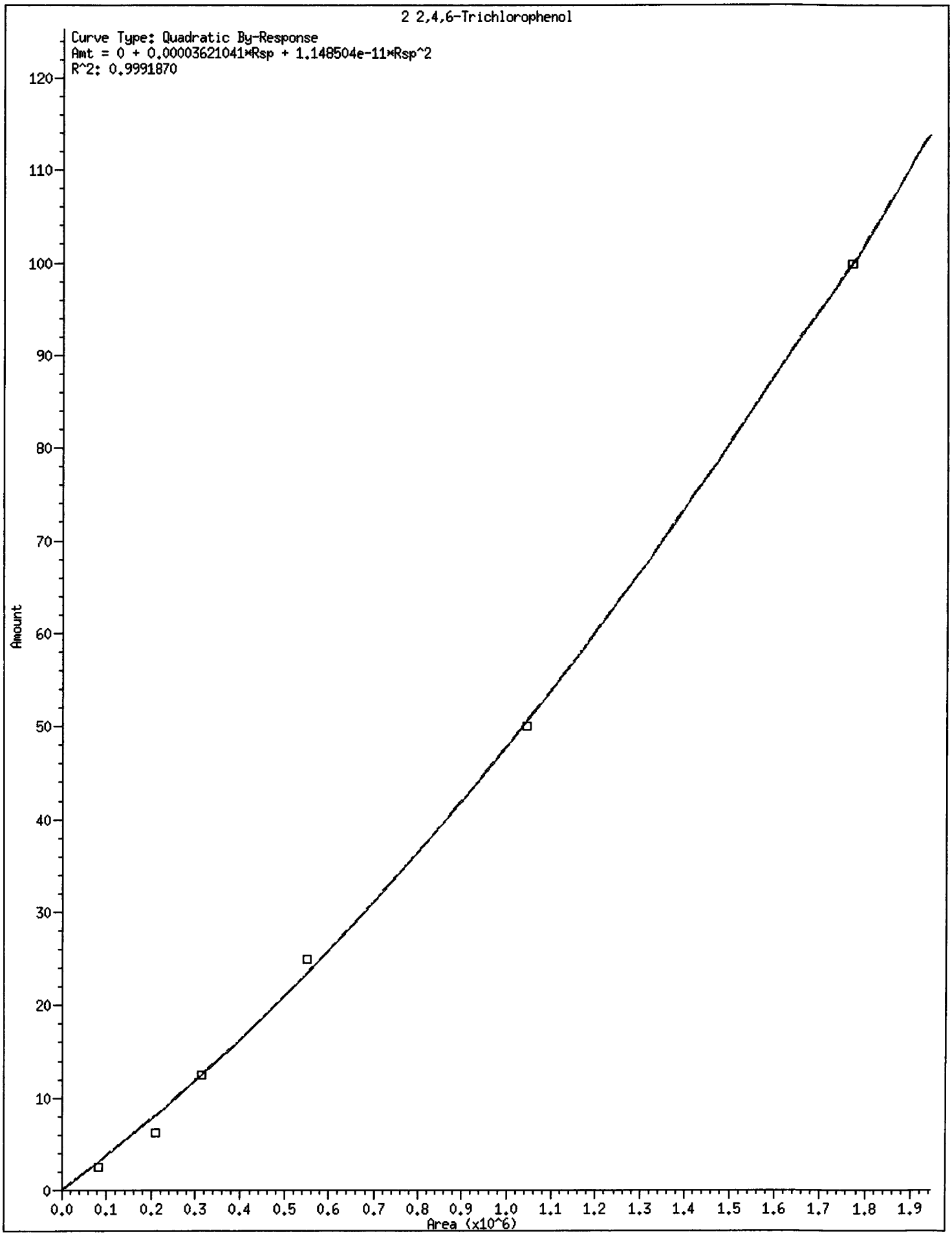
INITIAL CALIBRATION DATA

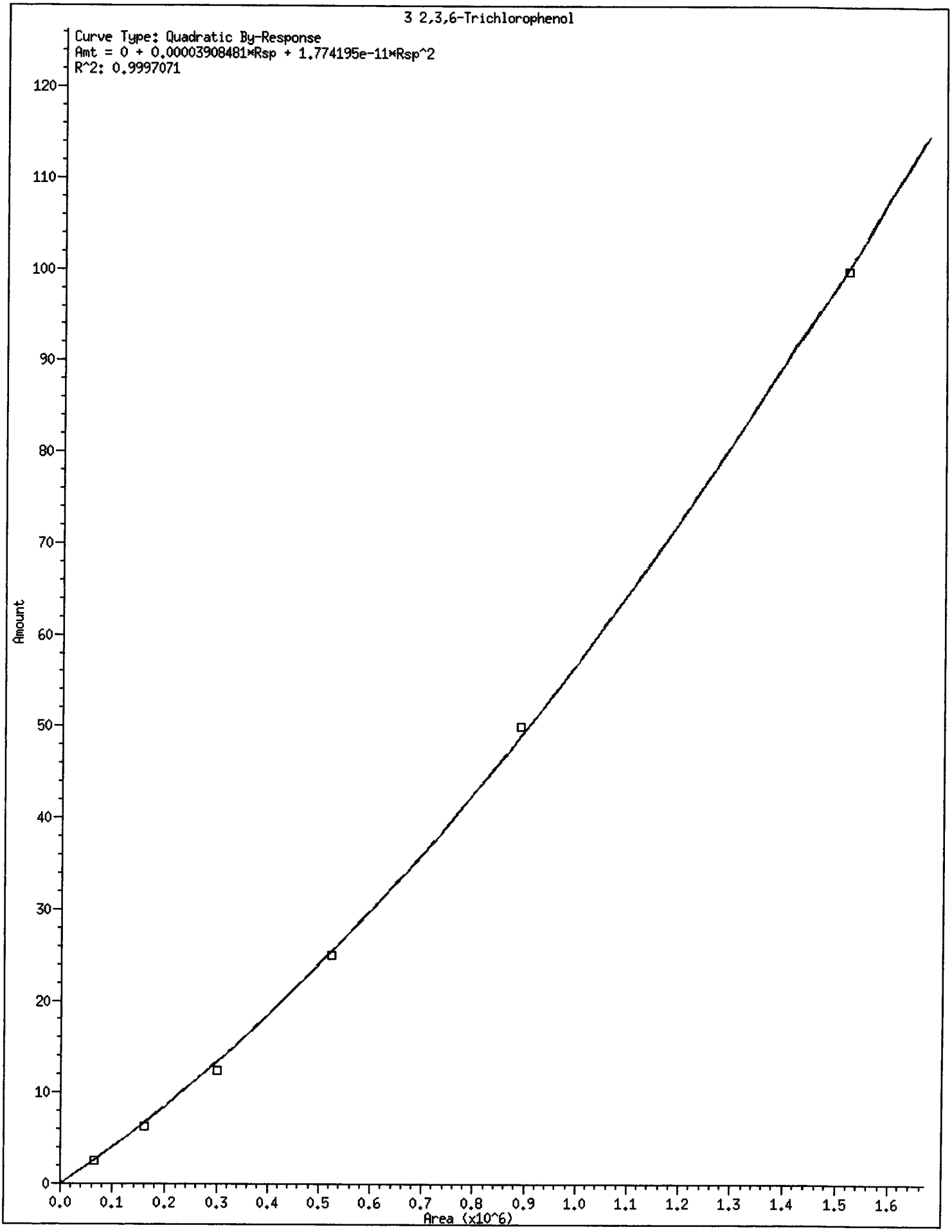
Start Cal Date : 21-SEP-2012 19:28
End Cal Date : 21-SEP-2012 22:30
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/PCP20120921.b/PCPB.m
Cal Date : 25-Sep-2012 10:11 aron
Curve Type : Average

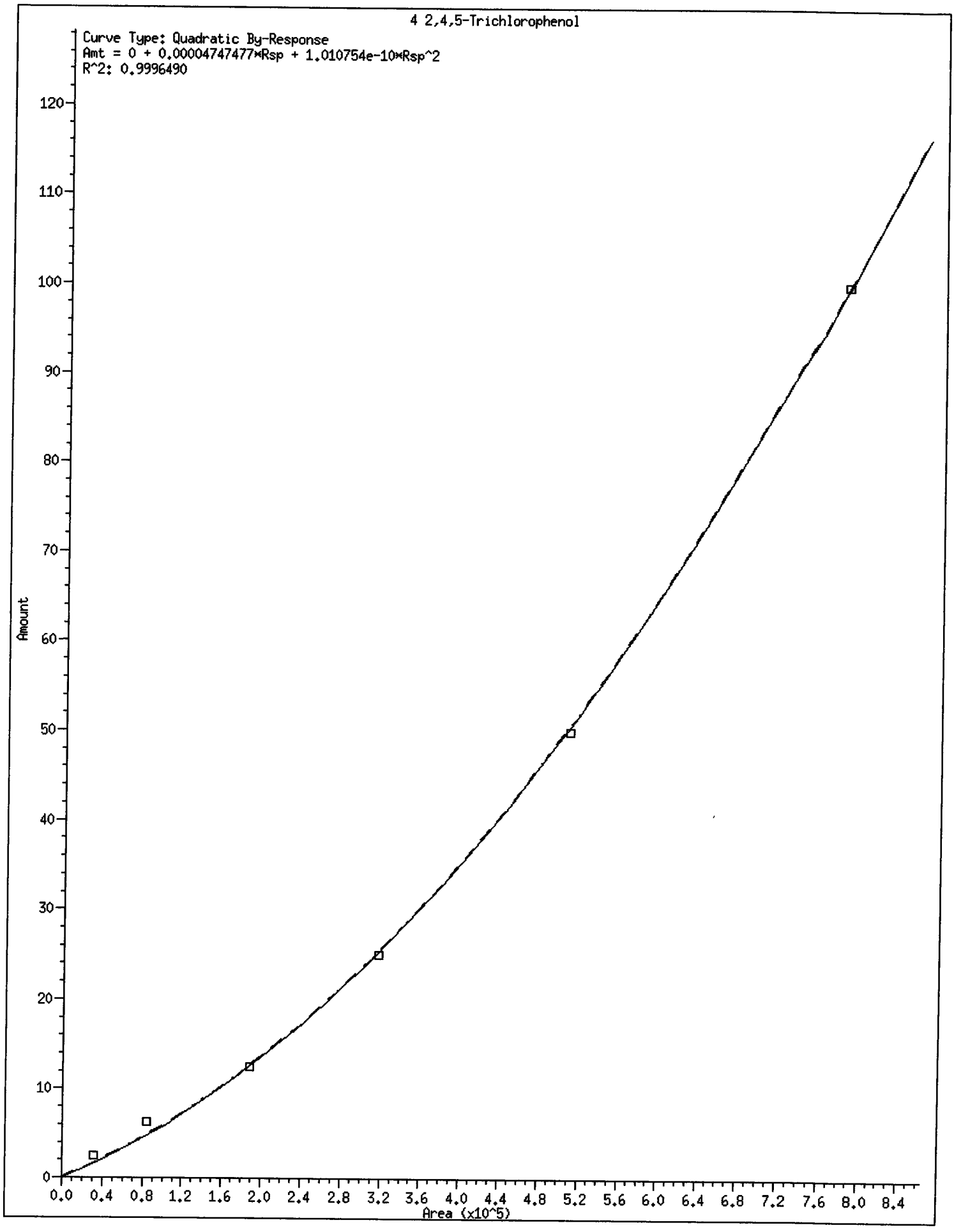
Calibration File Names:
Level 1: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A018.d
Level 2: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A019.d
Level 3: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A020.d
Level 4: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A017.d
Level 5: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A021.d
Level 6: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A022.d

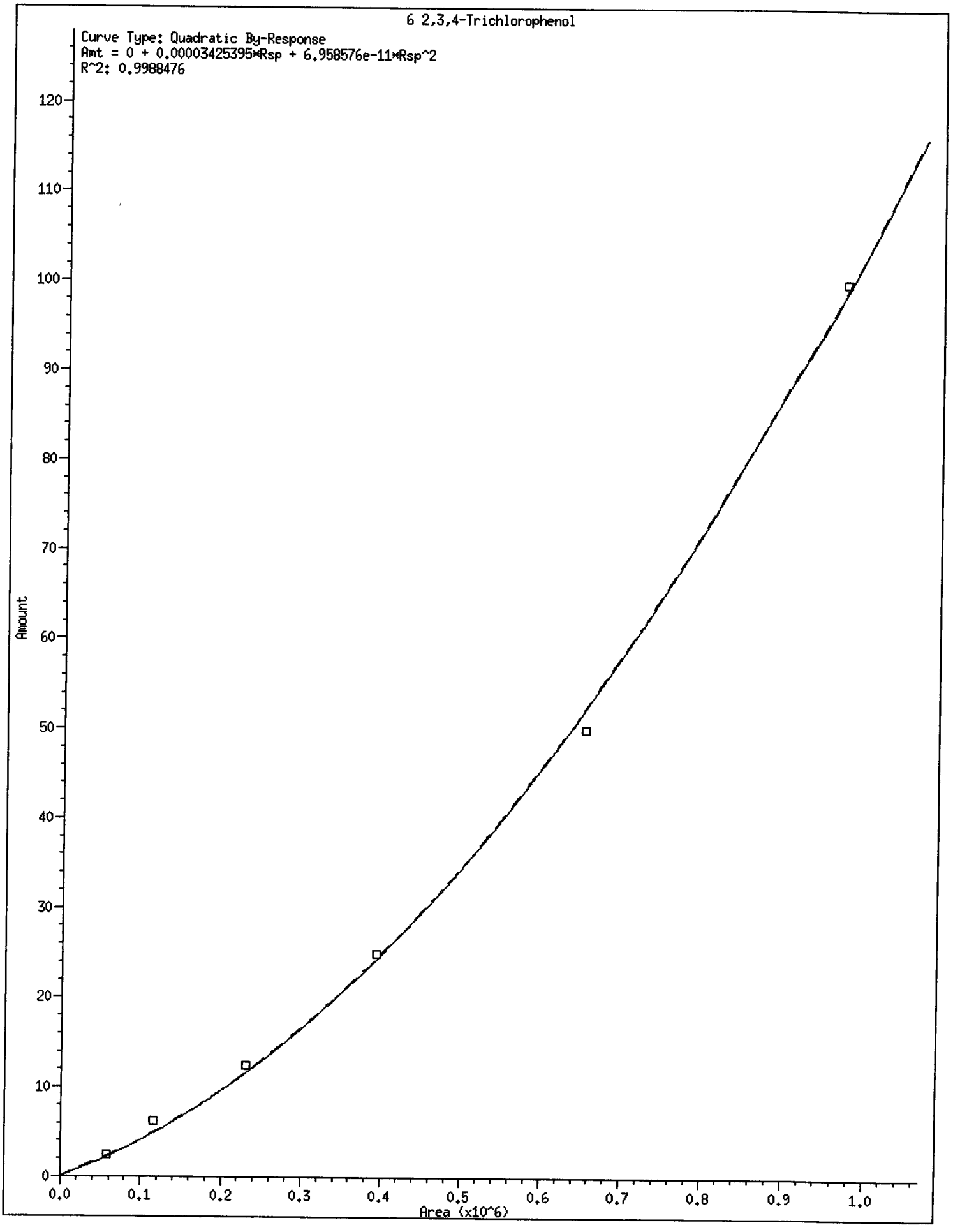
	Compound	2.500 Level 1	6.250 Level 2	12.500 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	___ RRF	% RSD	
1	2,4-Dichlorophenol	1292	1502	1138	970	877	712	1082	26.637	<-
2	2,4,6-Trichlorophenol	32528	33312	25171	22050	20938	17684	25280	25.269	<-
3	2,3,6-Trichlorophenol	25874	25680	24007	20973	17820	15189	21590	20.347	<-
4	2,4,5-Trichlorophenol	12584	13469	15051	12710	10198	7860	11979	21.347	<-
5	2,3,5,6-Tetrachlorophenol	33035	31396	31059	28607	26066	23149	28886	12.877	
6	2,3,4-Trichlorophenol	23072	18508	18408	15761	13094	9728	16428	28.400	<-
8	2,3,4,5-Tetrachlorophenol	25112	23550	21899	20040	18059	15675	20723	16.950	
9	Pentachlorophenol	42596	39717	37527	34681	31627	27985	35689	15.046	
$ 7	2,4,6-Tribromophenol (surr)	33881	32521	32652	29584	27527	24749	30152	11.695	


1 2,4-Dichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.0007495282*Rsp + 9.19662e-10*Rsp^2
R^2: 0.9993119
Amount (x10^3)
Area (x10^5)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
0.0 0.4 0.8 1.2 1.6 2.0 2.4 2.8 3.2 3.6 4.0 4.4 4.8 5.2 5.6 6.0 6.4 6.8 7.2 7.6


2 2,4,6-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00003621041*Rsp + 1.148504e-11*Rsp^2
R^2: 0.9991870
Amount
Area (x10^6)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9


3 2,3,6-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00003908481*Rsp + 1.774195e-11*Rsp^2
R^2: 0.9997071
Amount
Area (x10^6)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6


4 2,4,5-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00004747477*Rsp + 1.010754e-10*Rsp^2
R^2: 0.9996490
Amount
Area (x10^5)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.4
0.8
1.2
1.6
2.0
2.4
2.8
3.2
3.6
4.0
4.4
4.8
5.2
5.6
6.0
6.4
6.8
7.2
7.6
8.0
8.4


6 2,3,4-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00003425395*Rsp + 6.958576e-11*Rsp^2
R^2: 0.9988476
Amount
Area (x10^6)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2012 19:28
End Cal Date : 21-SEP-2012 22:30
Quant Method : ESTD
Origin : Force
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/PCP20120921.b/PCPB.m
Cal Date : 25-Sep-2012 10:11 aron

Calibration File Names:
Level 1: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A018.d
Level 2: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A019.d
Level 3: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A020.d
Level 4: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A017.d
Level 5: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A021.d
Level 6: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A022.d

	2	6	12	25	50	100		Coefficients			%RSD
Compound	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
1 2,4-Dichlorophenol	32292	93863	142277	242396	438585	711683	QUAD	0.000e+00	0.00075	9.197e-10	0.99931
2 2,4,6-Trichlorophenol	81319	208197	314632	551249	1046878	1768391	QUAD	0.000e+00	0.00004	1.149e-11	0.99919
3 2,3,6-Trichlorophenol	64685	160501	300088	524327	891000	1518853	QUAD	0.000e+00	0.00004	1.774e-11	0.99971
4 2,4,5-Trichlorophenol	31460	84183	188136	317756	509875	786042	QUAD	0.000e+00	0.00005	1.011e-10	0.99965
5 2,3,5,6-Tetrachlorophenol	33035	31396	31059	28607	26066	23149	AVRG		28886		12.87707
6 2,3,4-Trichlorophenol	57679	115678	230095	394022	654702	972757	QUAD	0.000e+00	0.00003	6.959e-11	0.99885
8 2,3,4,5-Tetrachlorophenol	25112	23550	21899	20040	18059	15675	AVRG		20723		16.95022
9 Pentachlorophenol	42596	39717	37527	34681	31627	27985	AVRG		35689		15.04595
7 2,4,6-Tribromophenol (surr)	33881	32521	32652	29584	27527	24749	AVRG		30152		11.69494

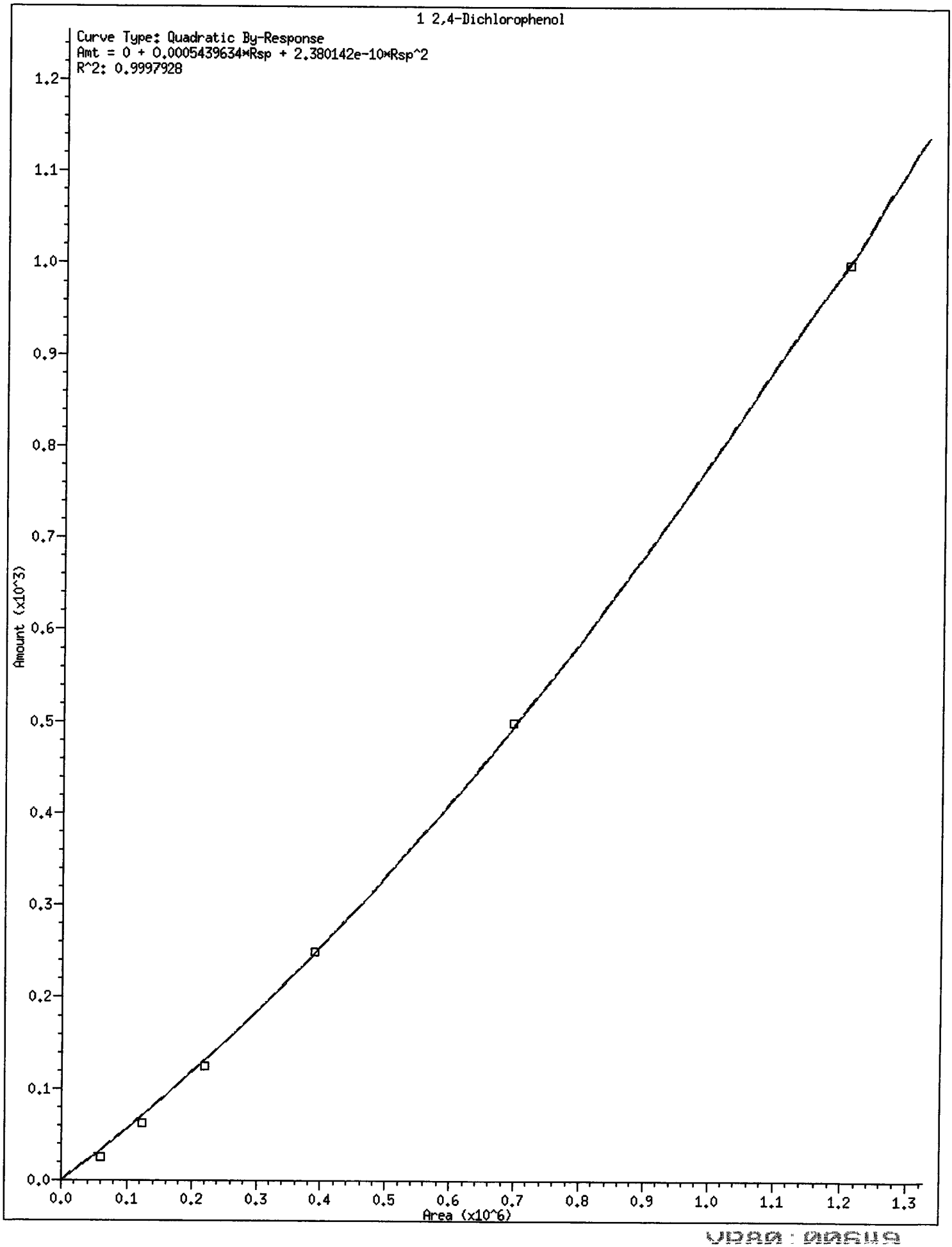
Analytical Resources, Inc.

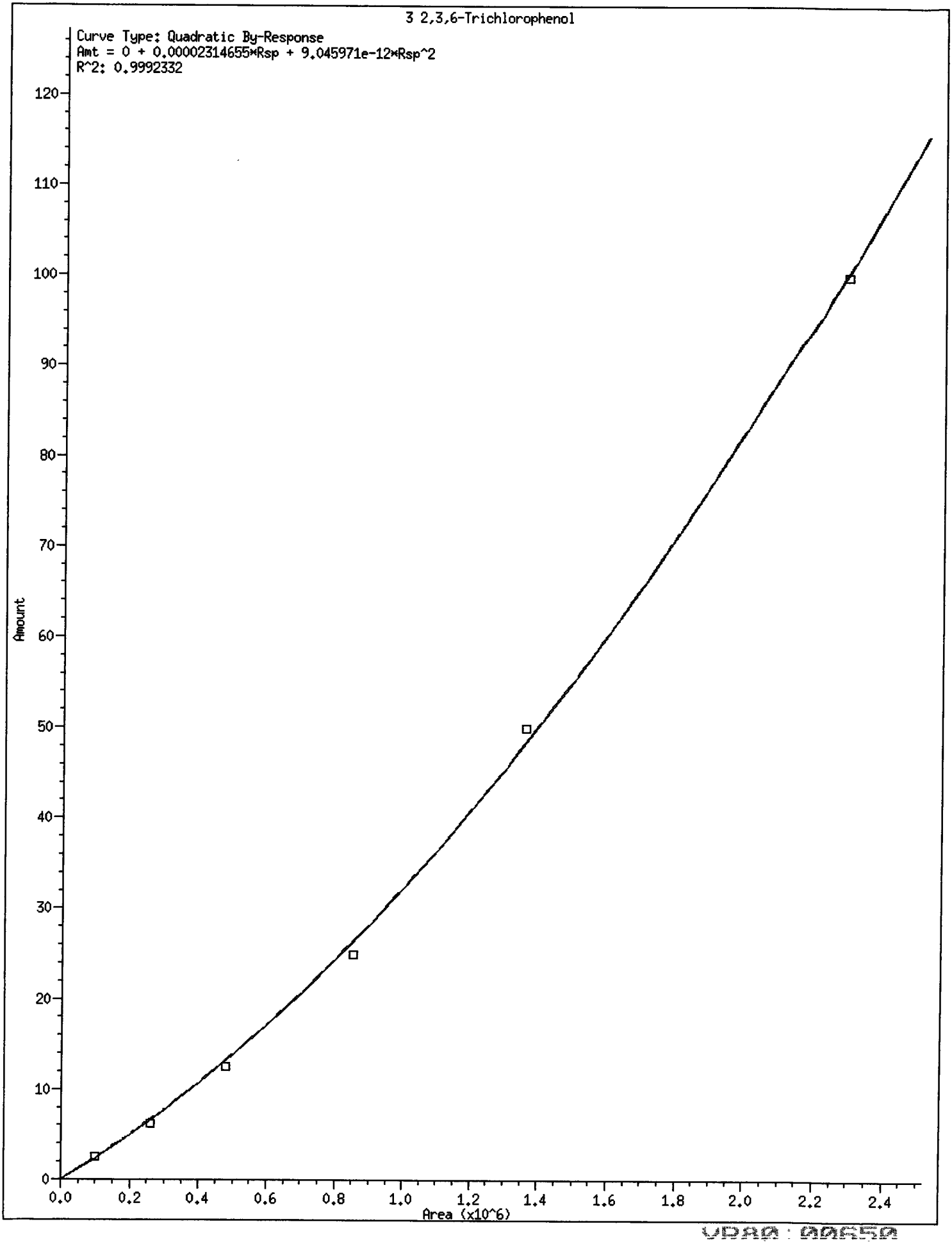
INITIAL CALIBRATION DATA

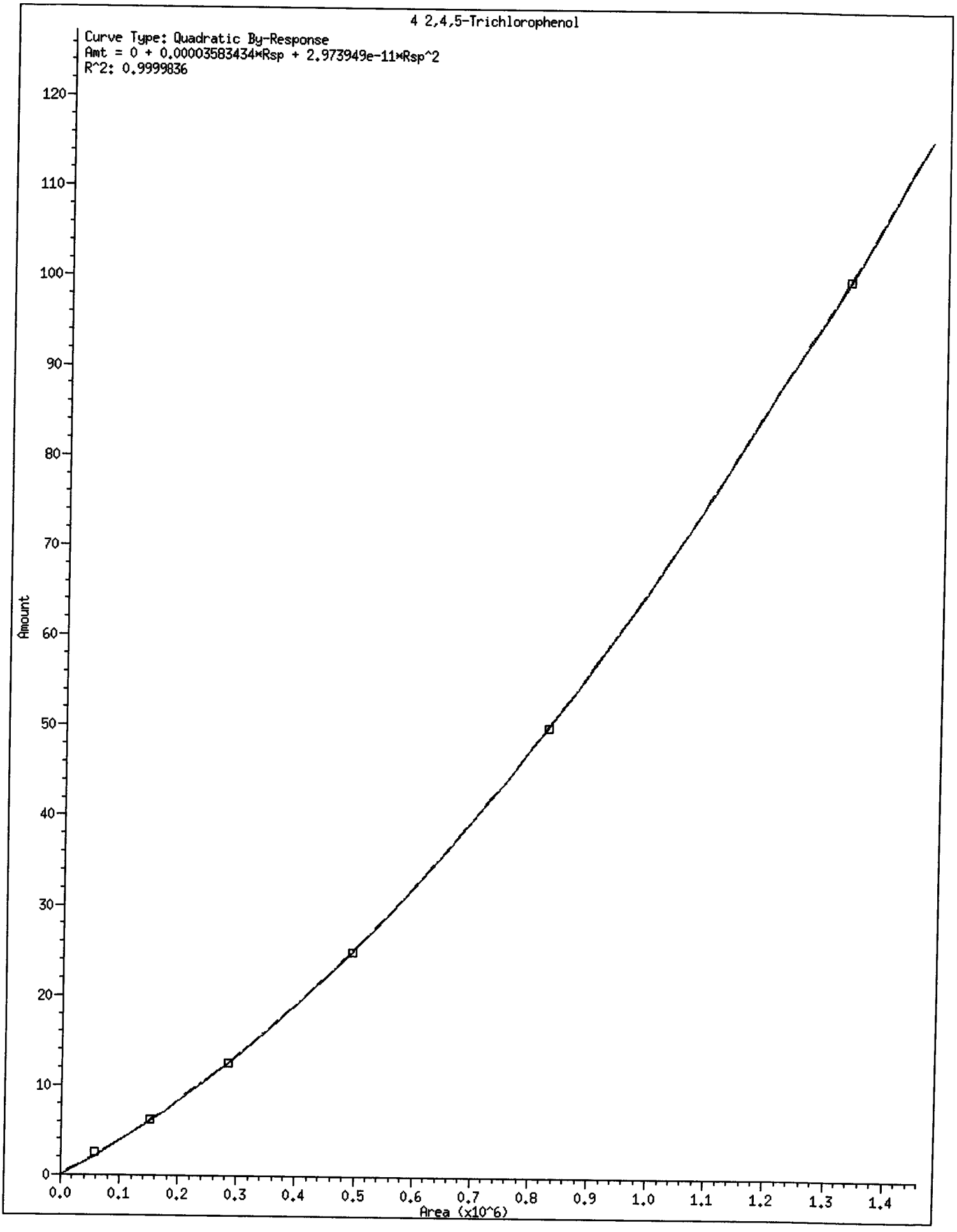
Start Cal Date : 21-SEP-2012 19:28
End Cal Date : 21-SEP-2012 22:30
Quant Method : ESTD
Origin : Disabled
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/PCP20120921.b/PCP.m
Cal Date : 25-Sep-2012 12:45 aron
Curve Type : Average

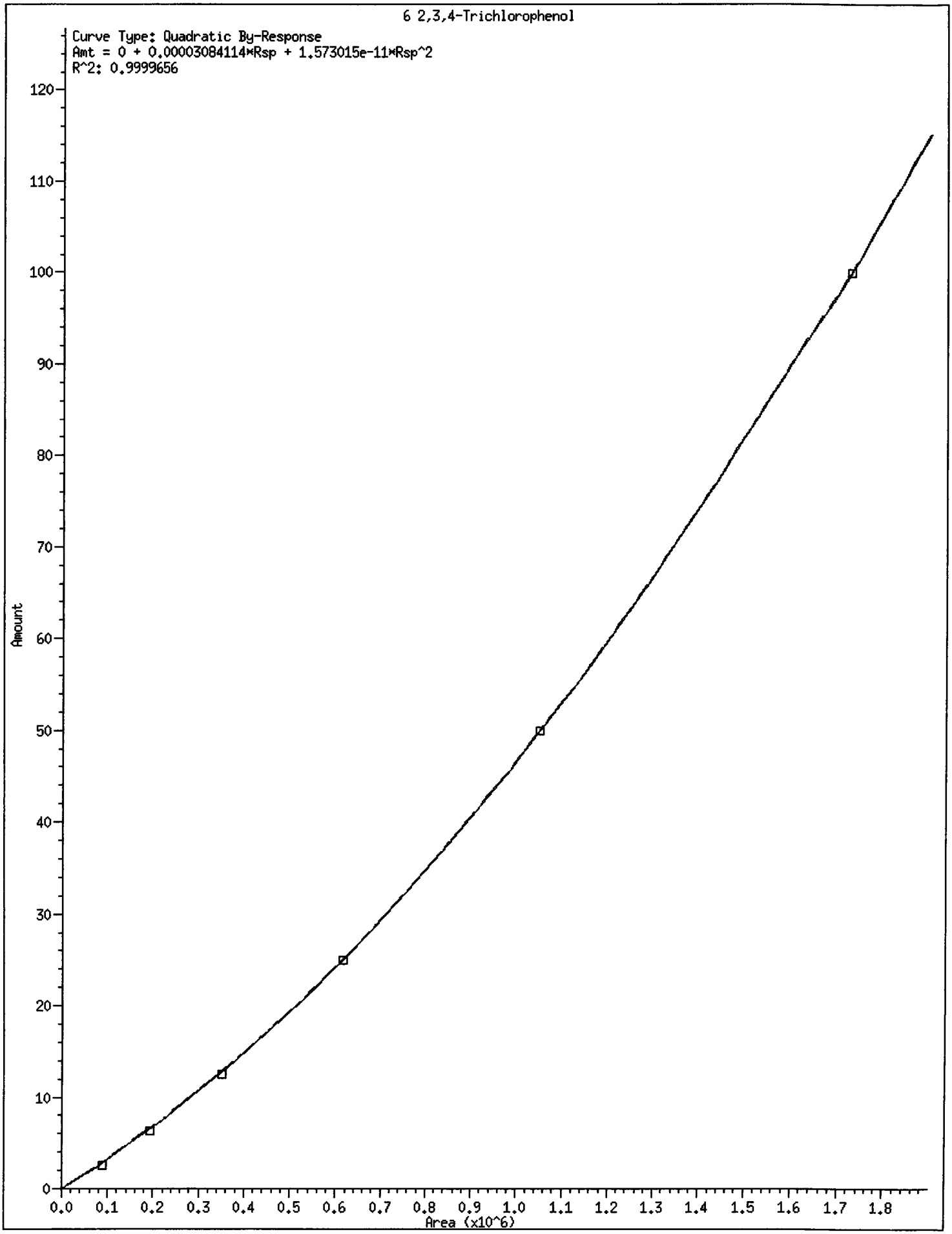
Calibration File Names:
Level 1: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A018.d
Level 2: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A019.d
Level 3: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A020.d
Level 4: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A017.d
Level 5: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A021.d
Level 6: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A022.d

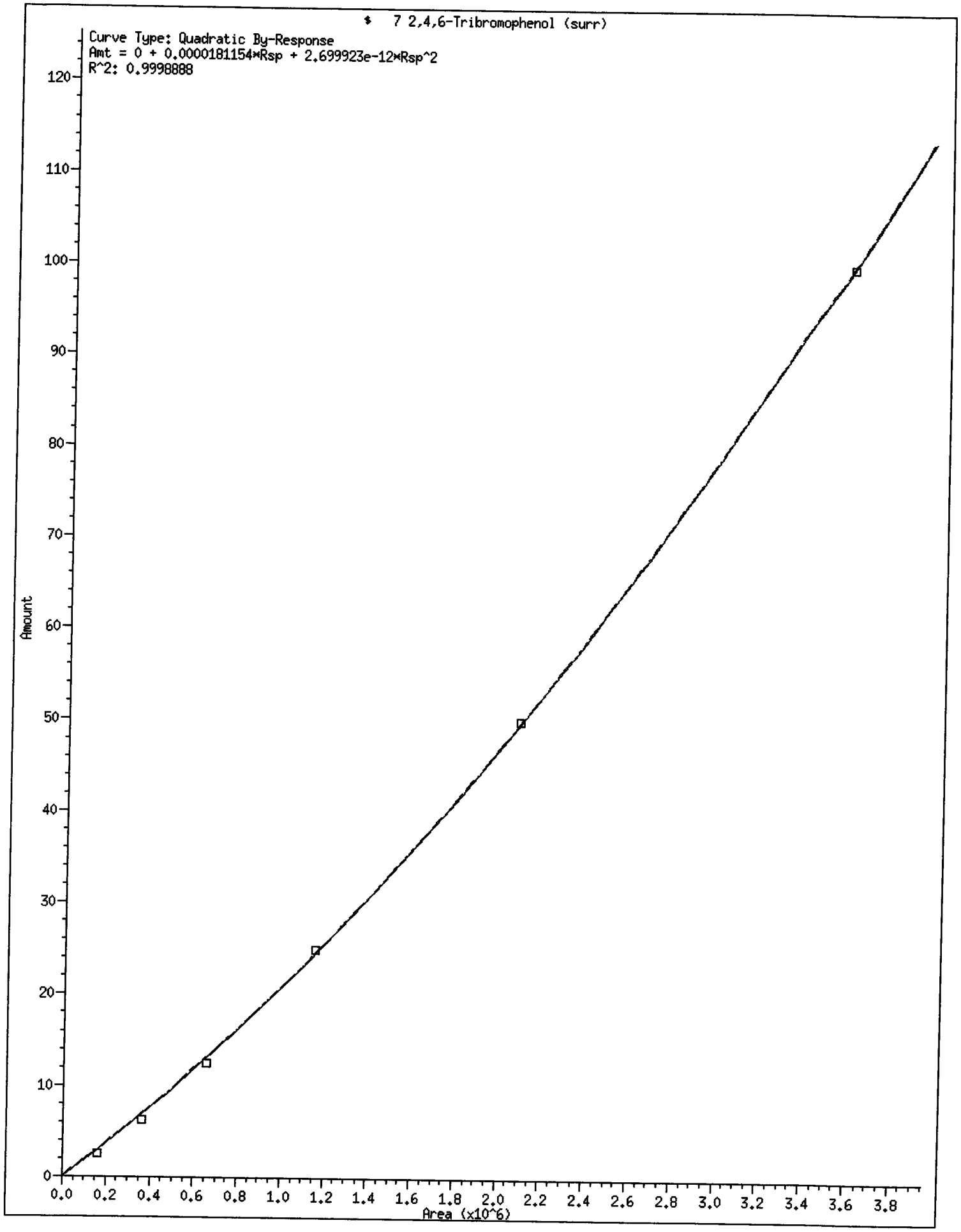
Compound	2.500 Level 1	6.250 Level 2	12.500 Level 3	25.000 Level 4	50.000 Level 5	100.000 Level 6	RRF	% RSD	
1 2,4-Dichlorophenol	2363	1981	1759	1559	1390	1206	1710	24.560	<-
2 2,4,6-Trichlorophenol	37800	36793	34435	30695	27572	23819	31852	17.232	
3 2,3,6-Trichlorophenol	39363	41432	38253	34053	27204	22897	33867	21.756	<-
4 2,4,5-Trichlorophenol	23290	24192	22777	19742	16572	13274	19974	21.611	<-
5 2,3,5,6-Tetrachlorophenol	53827	53395	50427	46244	41856	36207	46993	14.828	
6 2,3,4-Trichlorophenol	35575	30905	28044	24569	21009	17260	26227	25.461	<-
8 2,3,4,5-Tetrachlorophenol	50607	45516	41632	36089	31716	27069	38772	22.711	<-
9 Pentachlorophenol	77052	71102	62381	56971	51600	44551	60610	20.016	<-
$ 7 2,4,6-Tribromophenol (surr)	63570	57559	52456	46332	41843	35975	49623	20.614	<-

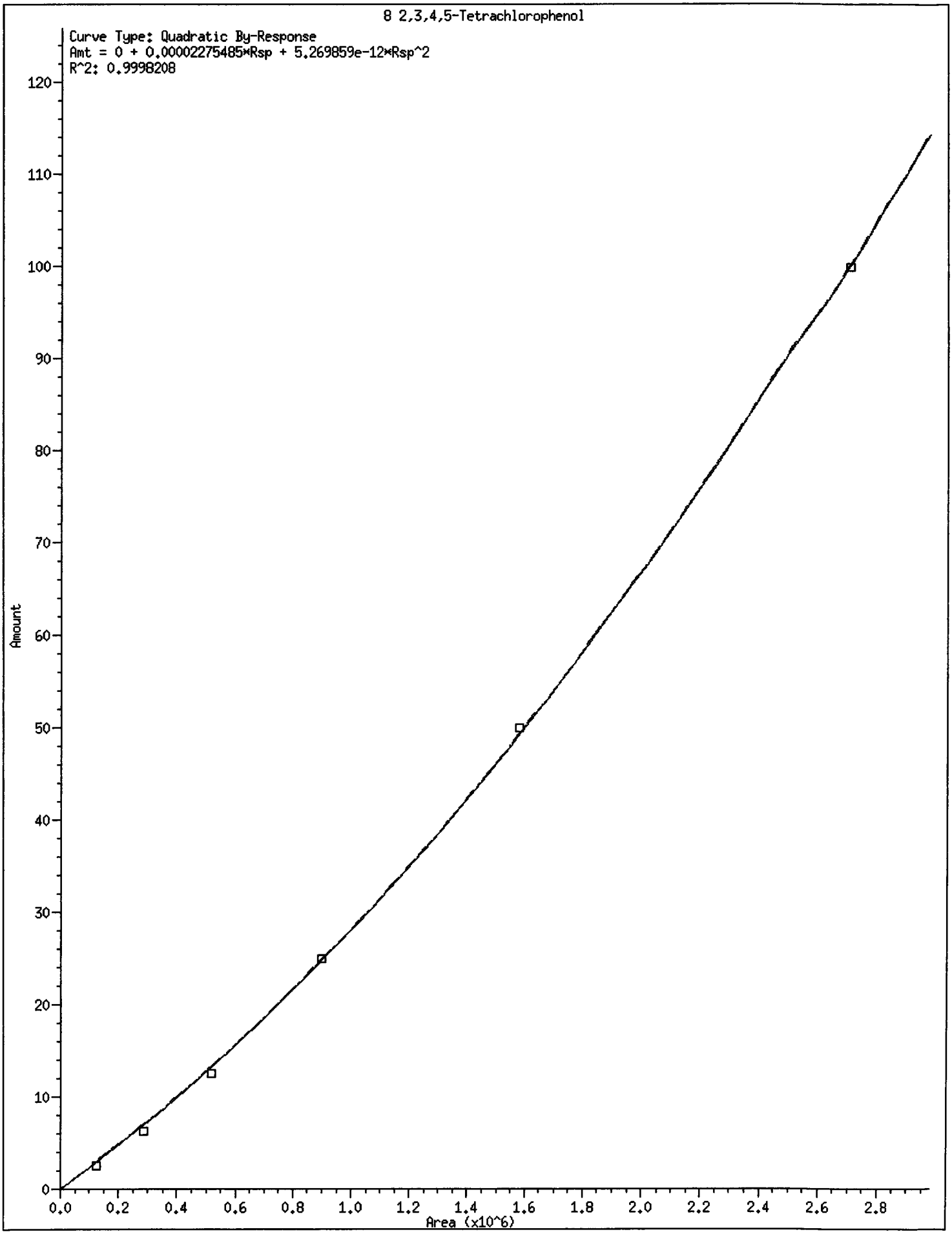

1 2,4-Dichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.0005439634*Rsp + 2.380142e-10*Rsp^2
R^2: 0.9997928
Amount (x10^3)
Area (x10^6)
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3

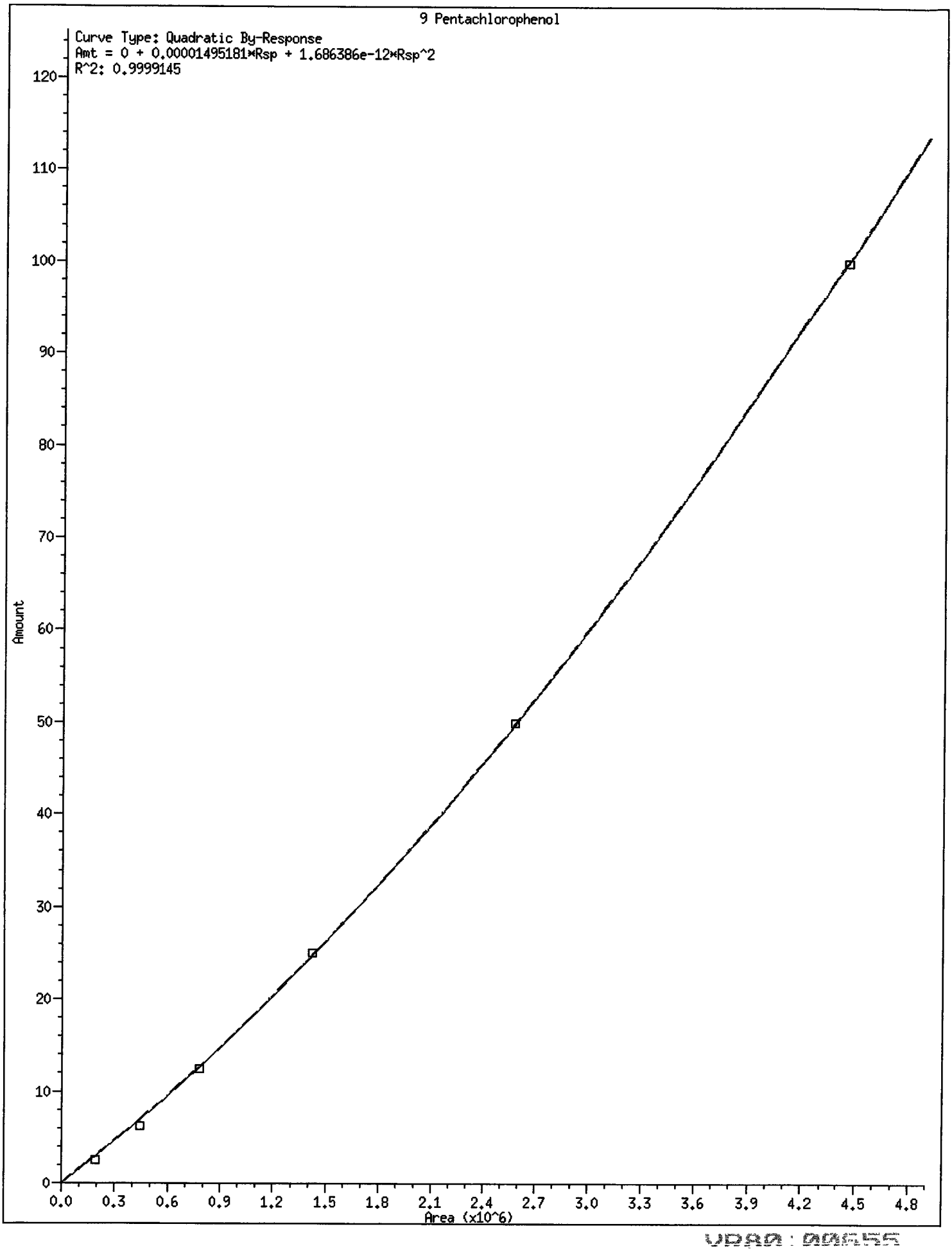

3 2,3,6-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00002314655*Rsp + 9.045971e-12*Rsp^2
R^2: 0.9992332
Amount
Area (x10^6)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4


4 2,4,5-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00003583434*Rsp + 2.973949e-11*Rsp^2
R^2: 0.9999836
Amount
Area (x10^6)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4


6 2,3,4-Trichlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00003084114*Rsp + 1.573015e-11*Rsp^2
R^2: 0.9999656
Amount
Area (x10^6)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8


$ 7 2,4,6-Tribromophenol (surr)
Curve Type: Quadratic By-Response
Amt = 0 + 0.0000181154*Rsp + 2.699923e-12*Rsp^2
R^2: 0.9998888
Amount
Area (x10^6)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8
3.0
3.2
3.4
3.6
3.8


8 2,3,4,5-Tetrachlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00002275485*Rsp + 5.269859e-12*Rsp^2
R^2: 0.9998208
Amount
Area (x10^6)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
1.6
1.8
2.0
2.2
2.4
2.6
2.8


9 Pentachlorophenol
Curve Type: Quadratic By-Response
Amt = 0 + 0.00001495181*Rsp + 1.686386e-12*Rsp^2
R^2: 0.9999145
Amount
Area (x10^6)
0
10
20
30
40
50
60
70
80
90
100
110
120
0.0
0.3
0.6
0.9
1.2
1.5
1.8
2.1
2.4
2.7
3.0
3.3
3.6
3.9
4.2
4.5
4.8

Analytical Resources, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 21-SEP-2012 19:28
End Cal Date : 21-SEP-2012 22:30
Quant Method : ESTD
Origin : Force
Target Version : 3.50
Integrator : HP Genie
Method file : /chem2/ecd1.i/PCP20120921.b/PCP.m
Cal Date : 25-Sep-2012 12:45 aron

Calibration File Names:
Level 1: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A018.d
Level 2: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A019.d
Level 3: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A020.d
Level 4: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A017.d
Level 5: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A021.d
Level 6: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A022.d

Compound	2 Level 1	6 Level 2	12 Level 3	25 Level 4	50 Level 5	100 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
1 2,4-Dichlorophenol	59080	123823	219893	389692	695219	1205949	QUAD	0.000e+00	0.00054	2.380e-10	0.99979
2 2,4,6-Trichlorophenol	37800	36793	34435	30695	27572	23819	AVRG		31852		17.23219
3 2,3,6-Trichlorophenol	98407	258950	478158	851316	1360198	2289663	QUAD	0.000e+00	0.00002	9.046e-12	0.99923
4 2,4,5-Trichlorophenol	58226	151202	284711	493541	828590	1327374	QUAD	0.000e+00	0.00004	2.974e-11	0.99998
5 2,3,5,6-Tetrachlorophenol	53827	53395	50427	46244	41856	36207	AVRG		46993		14.82781
6 2,3,4-Trichlorophenol	88937	193157	350554	614215	1050439	1725987	QUAD	0.000e+00	0.00003	1.573e-11	0.99997
8 2,3,4,5-Tetrachlorophenol	126517	284477	520404	902216	1585782	2706943	QUAD	0.000e+00	0.00002	5.270e-12	0.99982
9 Pentachlorophenol	192630	444389	779765	1424284	2579984	4455069	QUAD	0.000e+00	0.00001	1.686e-12	0.99991
7 2,4,6-Tribromophenol (surr)	158926	359745	655694	1158311	2092155	3597466	QUAD	0.000e+00	0.00002	2.700e-12	0.99989

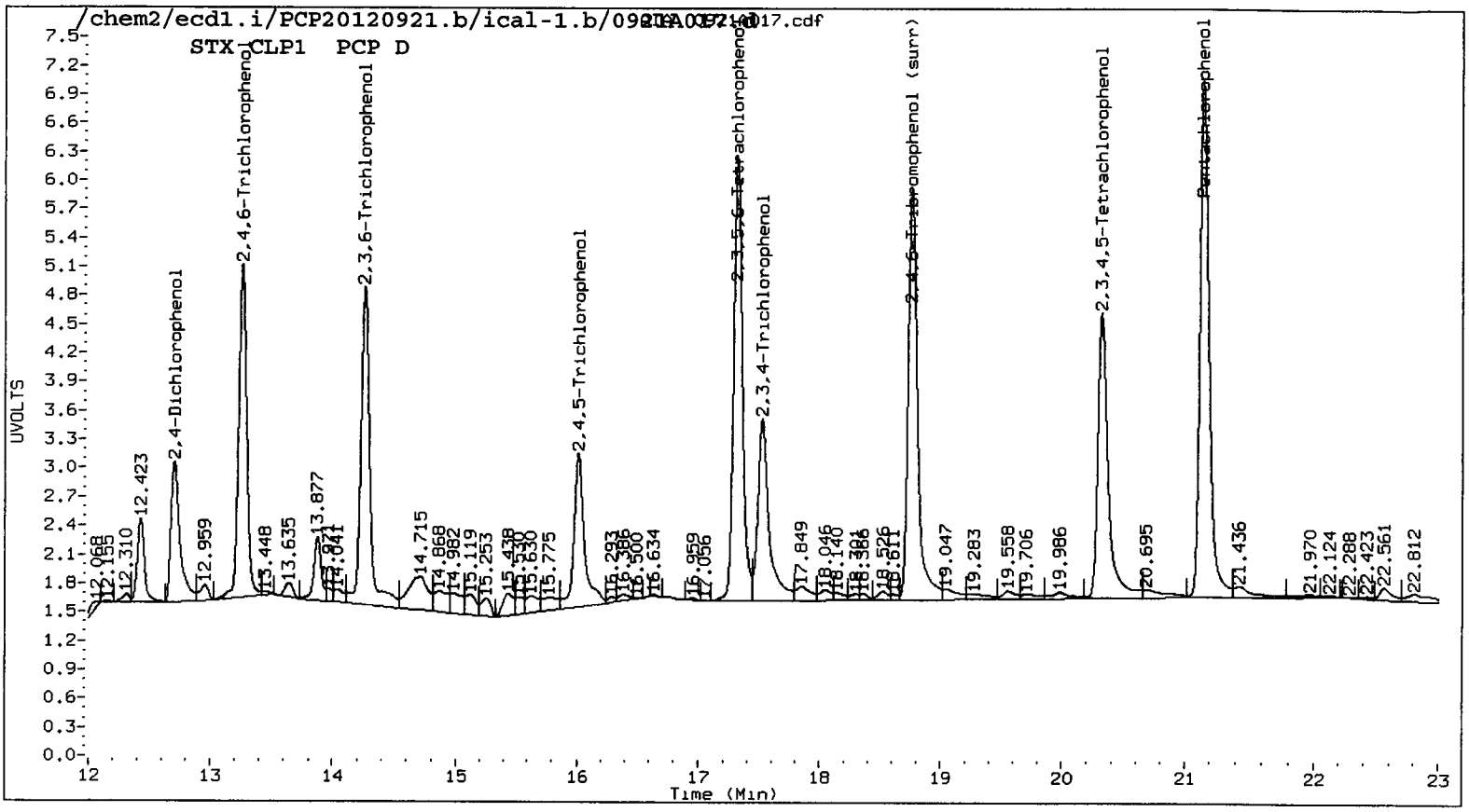
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

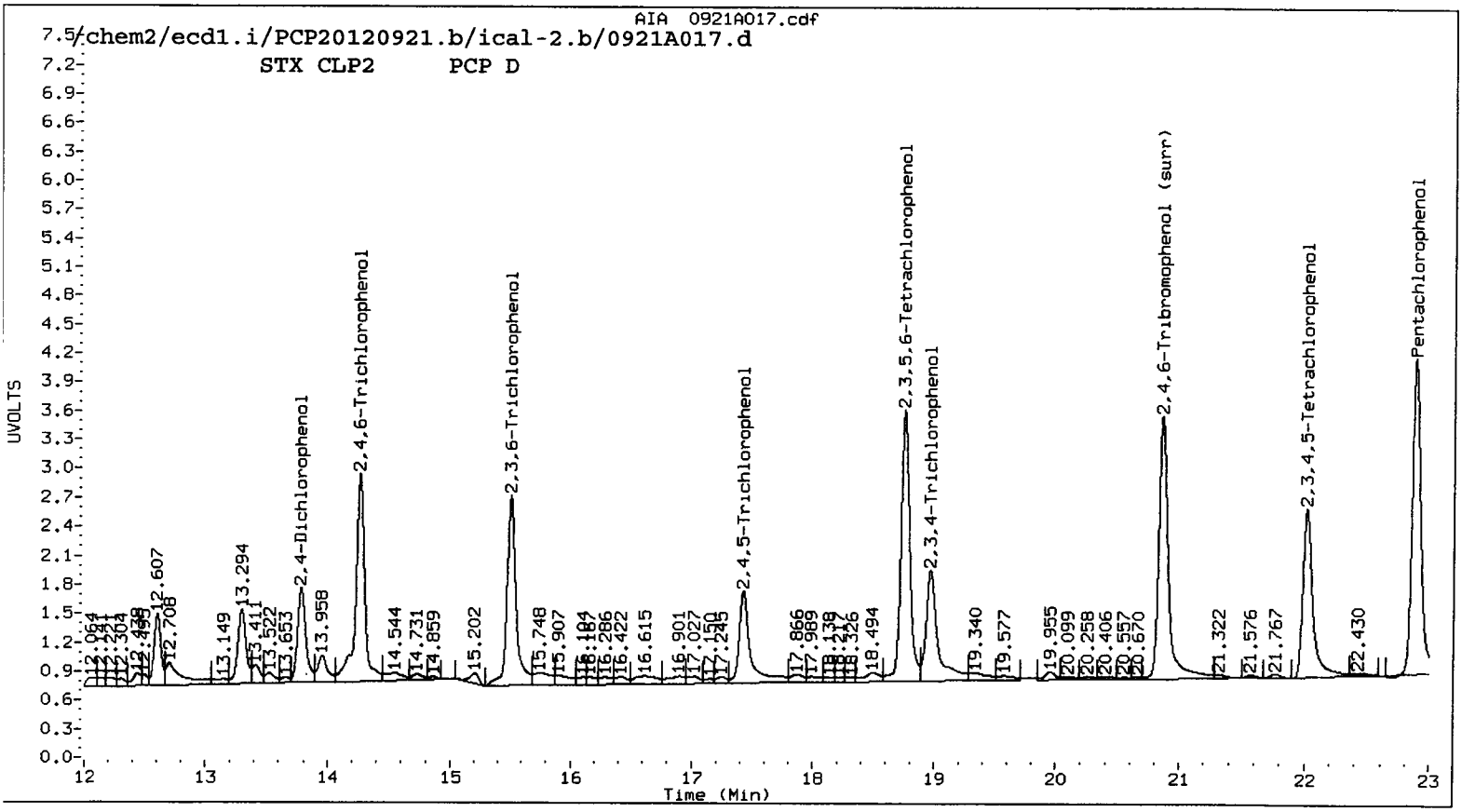
Data file 1: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A017.d ARI ID: PCP D
Data file 2: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A017.d Client ID:
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 21-SEP-2012 19:28
Compound Sublist: all Report Date: 09/25/2012 13:17
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

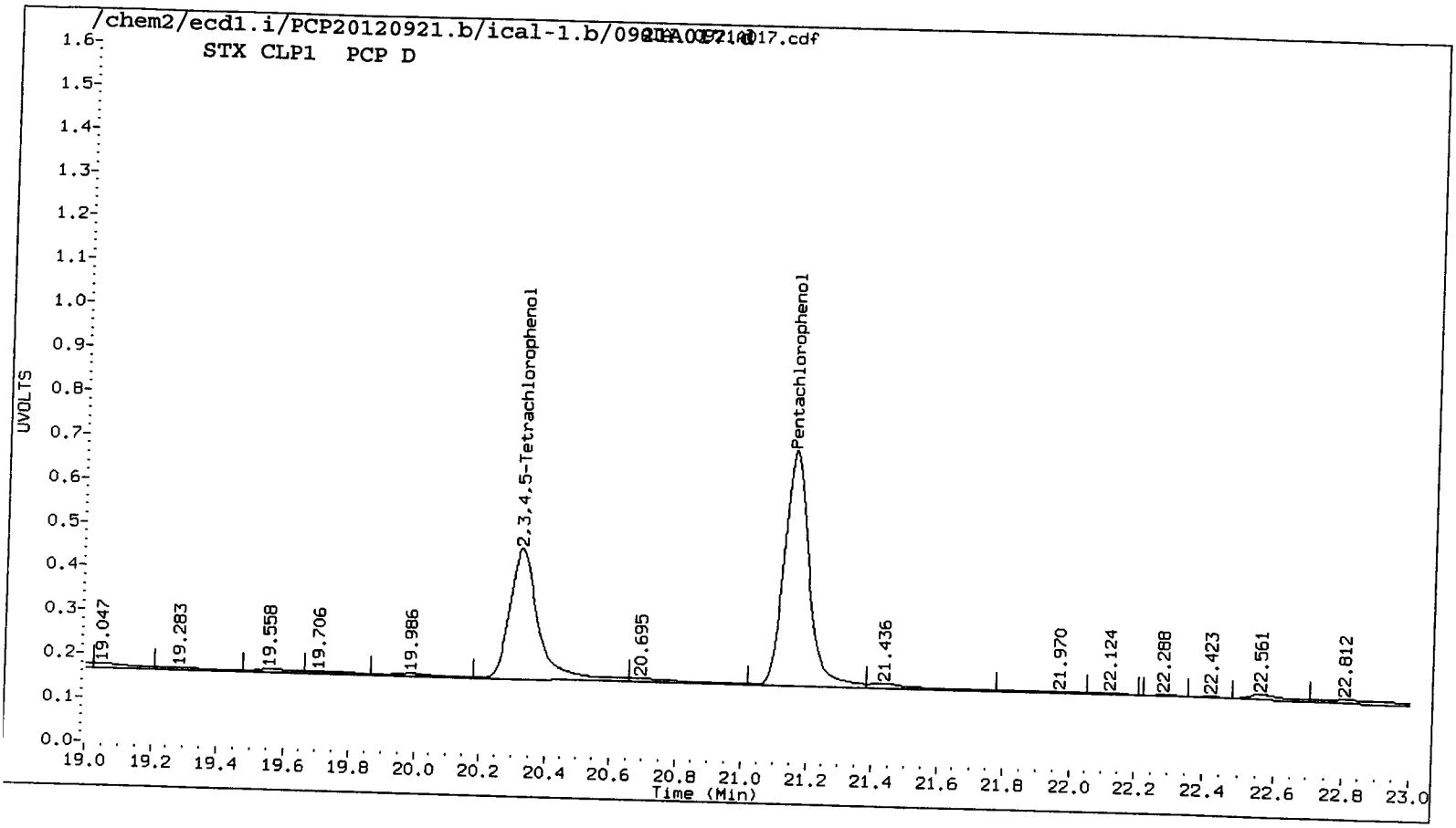
STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.158	0.000	1424284	22.888	0.000	867017	24.7166	24.2938	1.7	Pentachlorophenol
13.256	0.000	767382	14.264	0.000	551249	24.0918	23.4510	2.7	2,4,6-Trichlorophenol
14.254	0.000	851316	15.507	0.000	524327	26.2610	25.3708	3.4	2,3,6-Trichlorophenol
16.010	0.000	493541	17.423	0.000	317756	24.9297	25.2909	1.4	2,4,5-Trichlorophenol
17.519	0.000	614215	18.968	0.000	394022	24.8774	24.3002	2.3	2,3,4-Trichlorophenol
17.315	0.000	1156092	18.752	0.000	715183	24.6014	24.7592	0.6	2,3,5,6-Tetrachloroph
20.323	0.000	902216	22.012	0.000	501003	24.8194	24.1766	2.6	2,3,4,5-Tetrachlorophe
12.711	0.000	389692	13.778	0.000	242396	248.1230	235.7181	5.1	2,4-Dichlorophenol
18.763	0.000	1158311	20.867	0.000	739598	24.6	24.5	0.3	2,4,6-Tribromophenol (

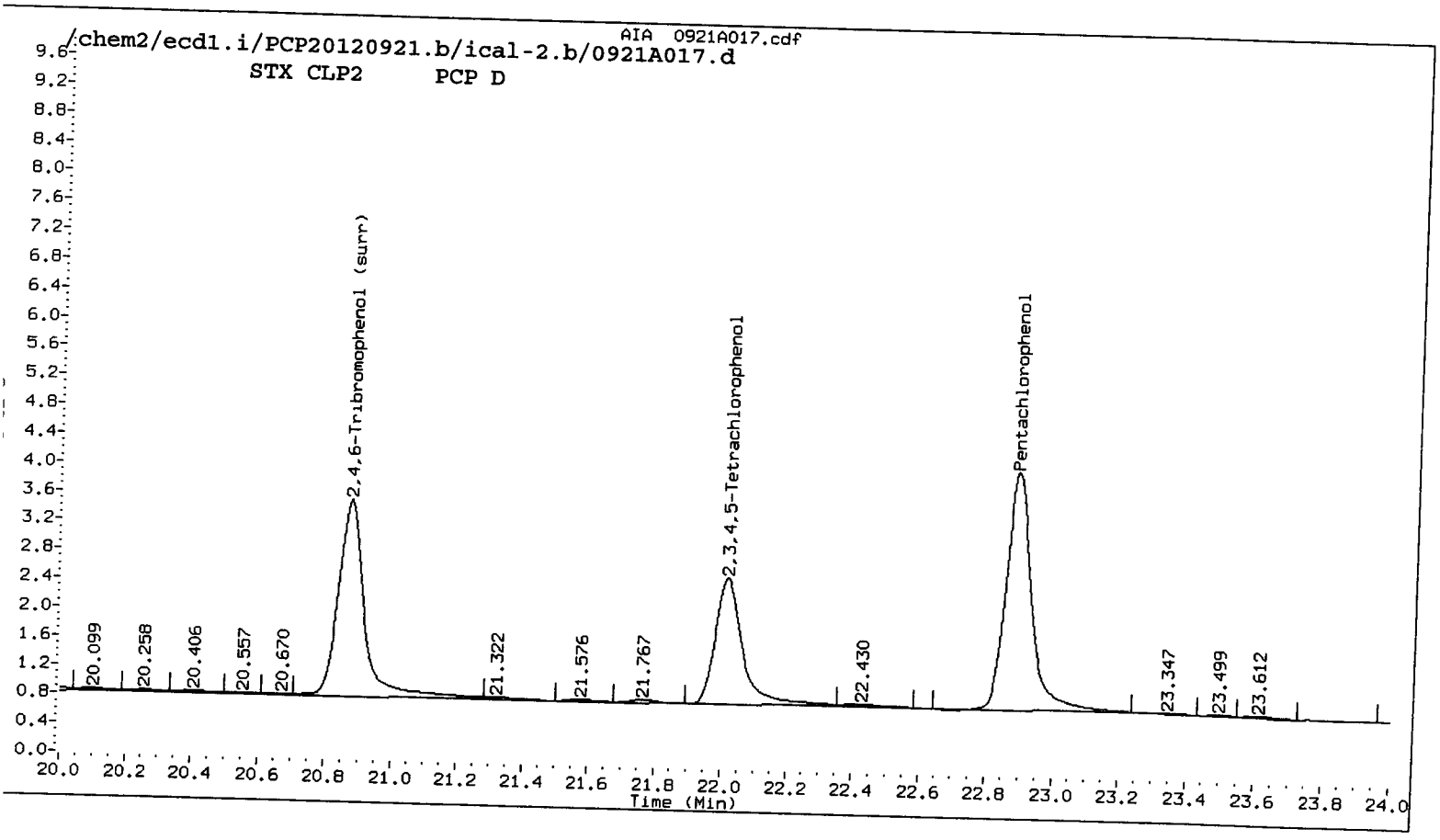
PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	98.4	98.1


/chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A017.cdf
STX CLP1 PCP D
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol


AIA 0921A017.cdf
/chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A017.d
STX CLP2 PCP D
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol


/chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A017.cdf
STX CLP1 PCP D
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.047
19.283
19.558
19.706
19.986
20.695
21.436
21.970
22.124
22.288
22.423
22.561
22.812
Time (Min)


AIA 0921A017.cdf
/chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A017.d
STX CLP2 PCP D
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.099
20.258
20.406
20.557
20.670
21.322
21.576
21.767
22.430
23.347
23.499
23.612
Time (Min)

Data File: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A017.d

Date : 21-SEP-2012 19:28

Client ID:

Instrument: ecd1.i

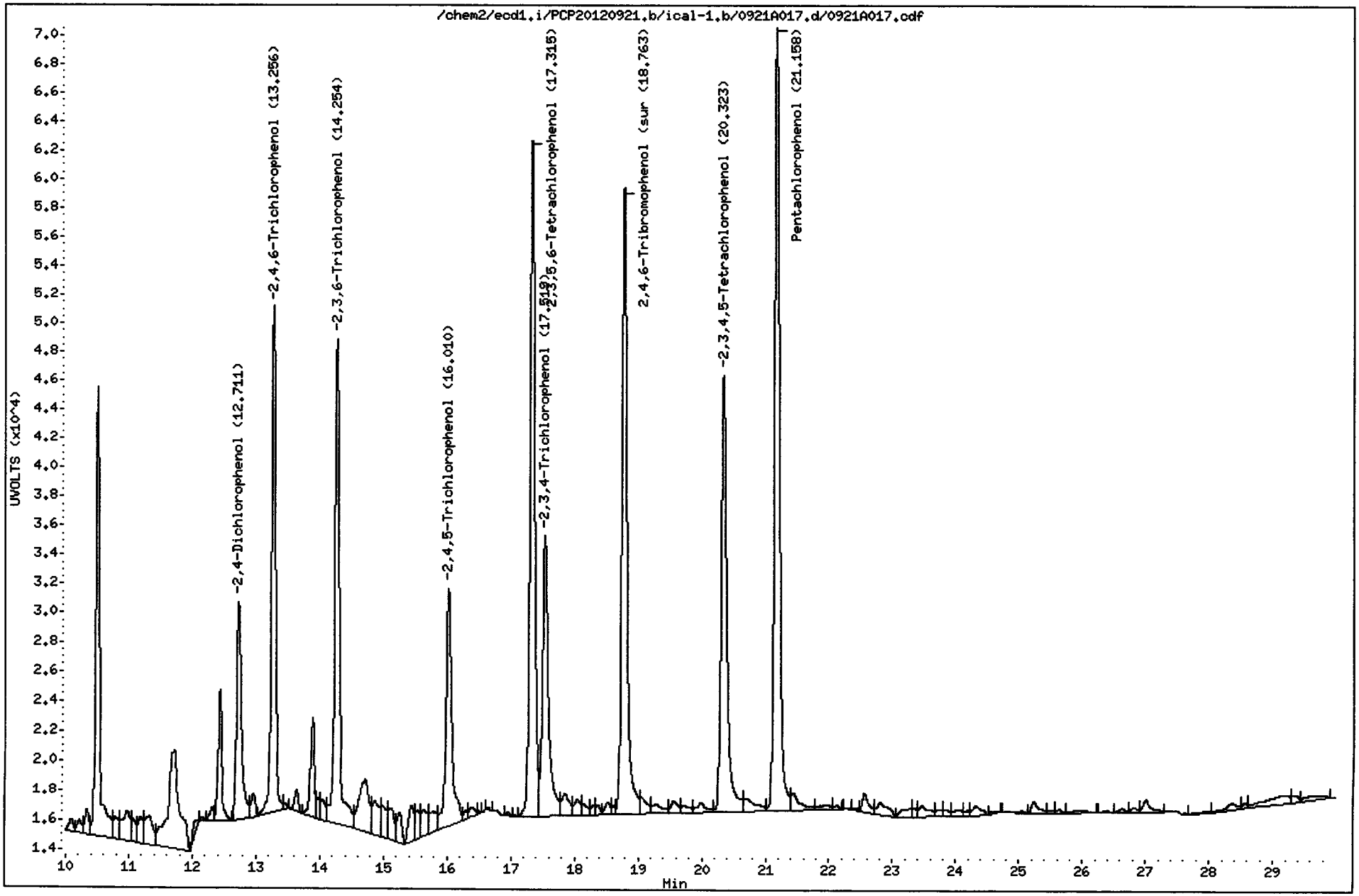
Sample Info: PCP D

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

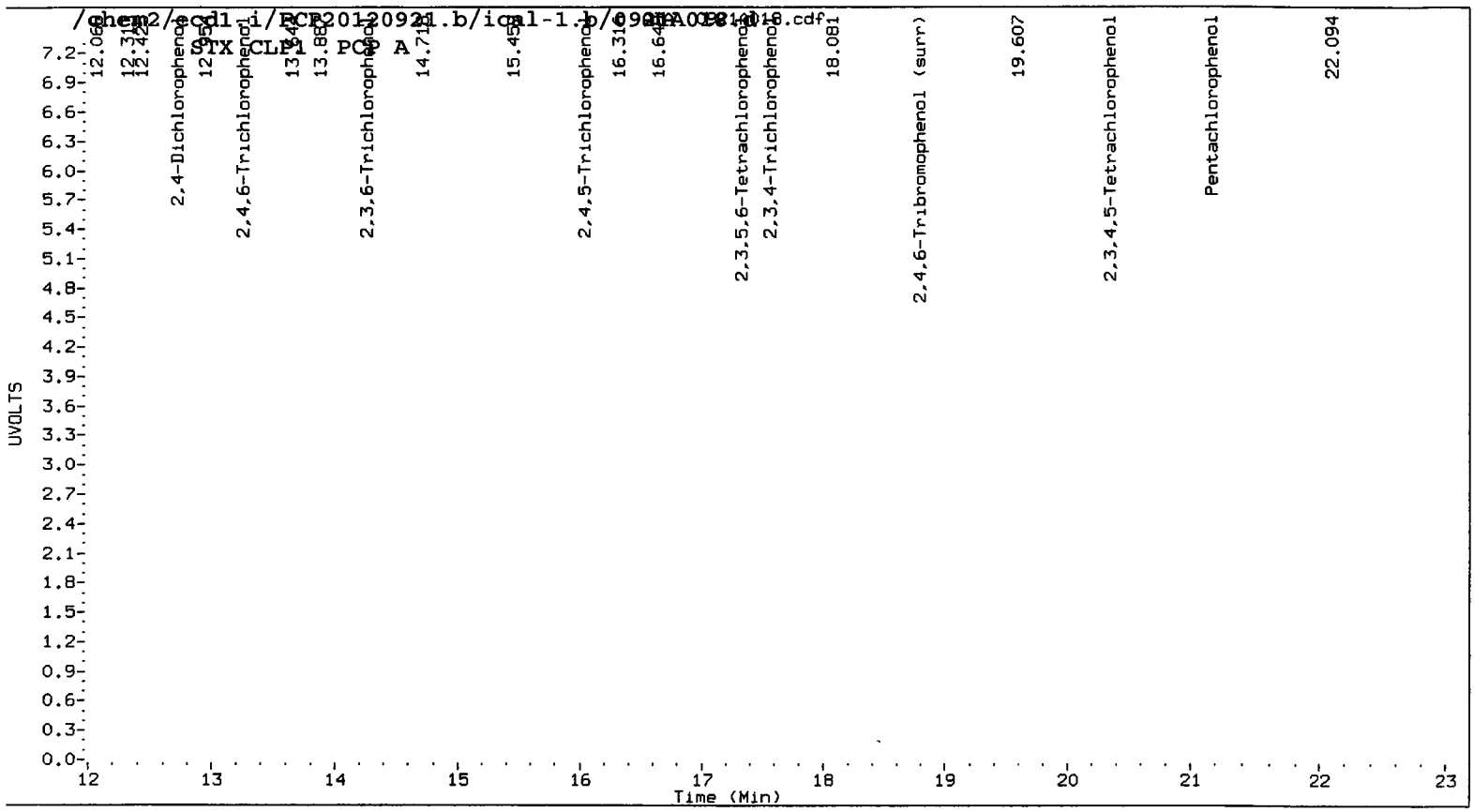
Data file 1: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A018.d ARI ID: PCP A
Data file 2: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A018.d Client ID:
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m
Compound Sublist: all
Instrument: ecd1.i
Operator: ar

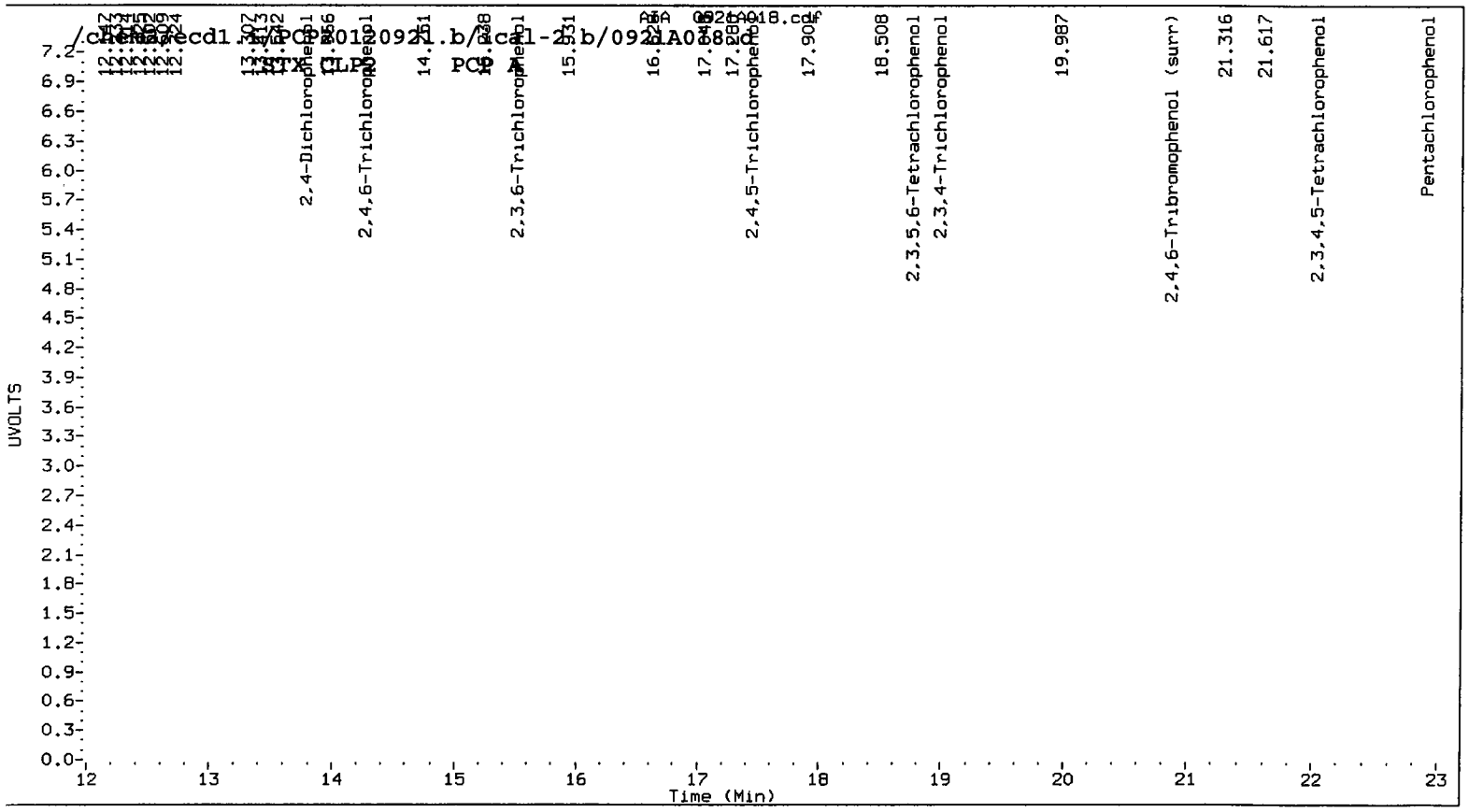
Injection Date: 21-SEP-2012 20:04
Report Date: 09/25/2012 13:17
Matrix: WATER
Dilution Factor: 1.000

STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.182	0.024	192630	22.906	0.018	106490	2.9427	2.9838	1.4	Pentachlorophenol
13.260	0.004	94500	14.268	0.004	81319	2.9668	3.0205	1.8	2,4,6-Trichlorophenol
14.262	0.008	98407	15.514	0.007	64685	2.3654	2.6024	9.5	2,3,6-Trichlorophenol
16.044	0.034	58226	17.448	0.025	31460	2.1873	1.5936	31.4	2,4,5-Trichlorophenol
17.566	0.047	88937	19.001	0.033	57679	2.8673	2.2072	26.0	2,3,4-Trichlorophenol
17.334	0.019	134568	18.767	0.015	82588	2.8636	2.8591	0.2	2,3,5,6-Tetrachlorophe
20.368	0.045	126517	22.044	0.032	62781	2.9632	3.0296	2.2	2,3,4,5-Tetrachlorophe
12.719	0.008	59080	13.787	0.009	32292	32.9681	25.1628	26.9	2,4-Dichlorophenol
18.793	0.030	158926	20.887	0.020	84702	2.9	2.8	4.8	2,4,6-Tribromophenol (s

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	11.8	11.2


/chem2/ecd1_i/PCB20120921.b/ical-1.b/092IA0018.cdf
STX CLP1 PCB A
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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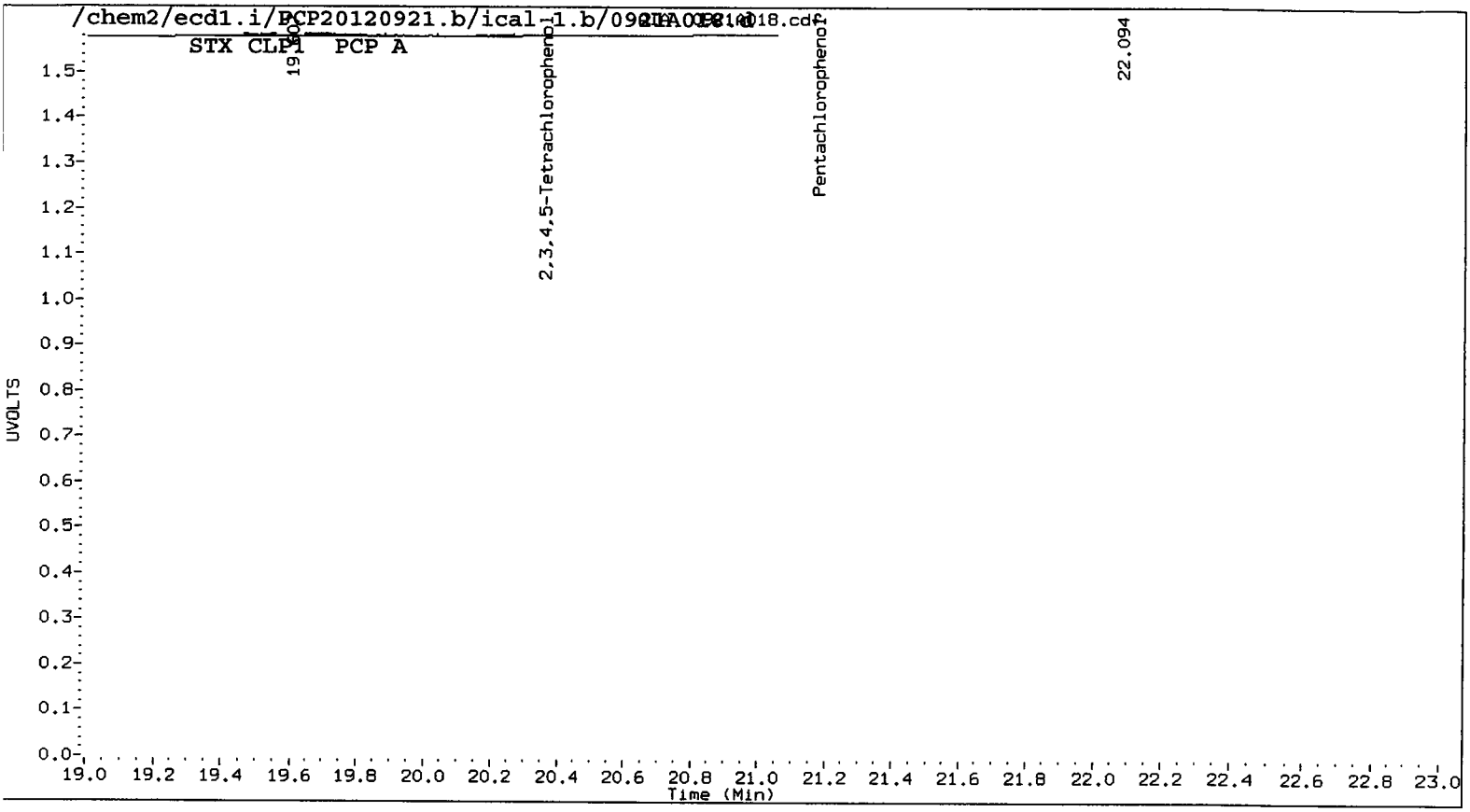
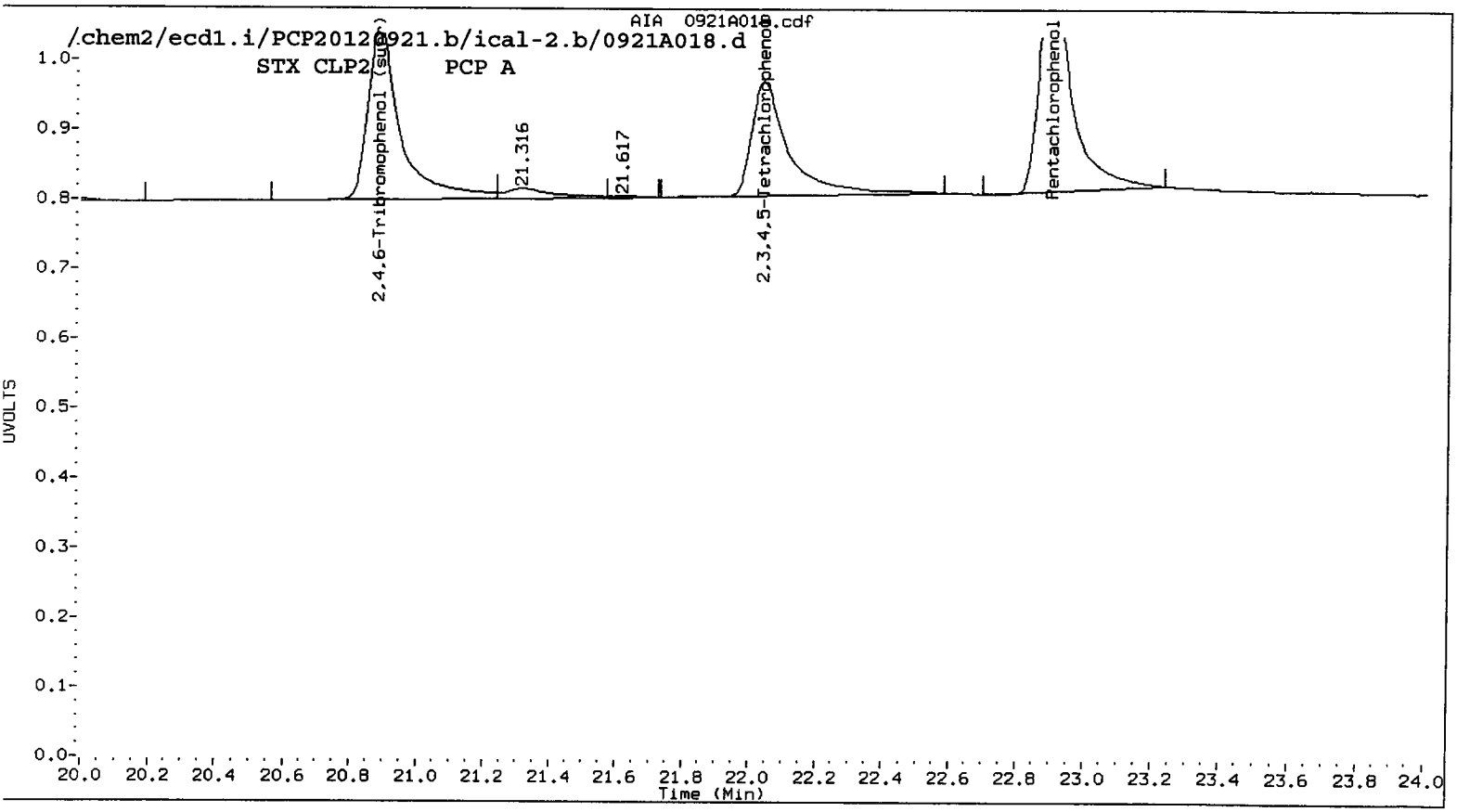
STX CLP1 PCB A
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol


/chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A018.d
STX CLP1 PCP A
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
22.094
UVOLTS
Time (Min)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AIA 0921A018.cdf
STX CLP2 PCP A
2,4,6-Tribromophenol (surr)
21.316
21.617
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)

Data File: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A018.d

Page 1

Date : 21-SEP-2012 20:04

Client ID:

Instrument: ecd1.i

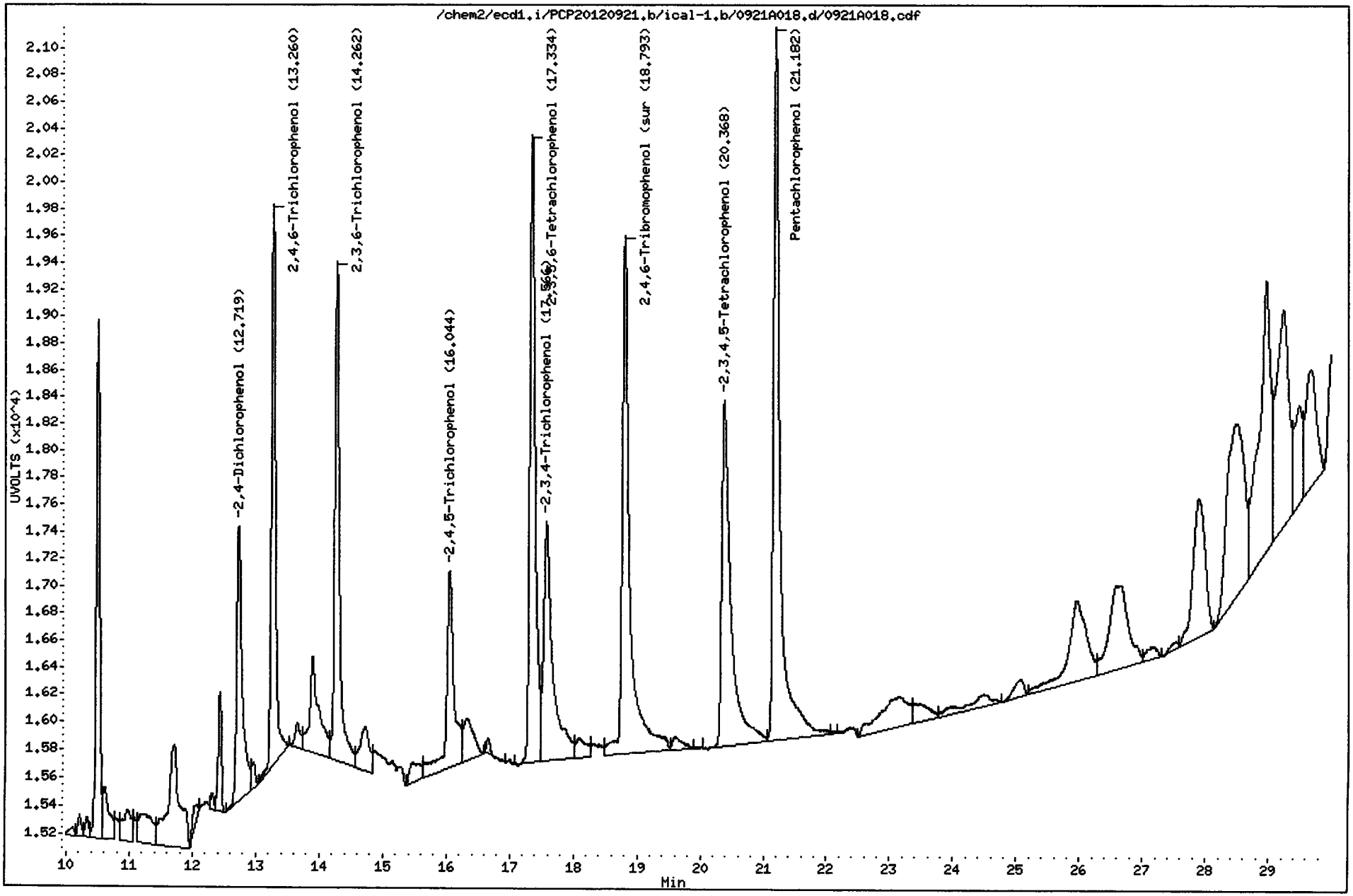
Sample Info: PCP A

Purge Volume: 500.0

Operator: ar

Column phase: STX CLP1

Column diameter: 0.53



Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

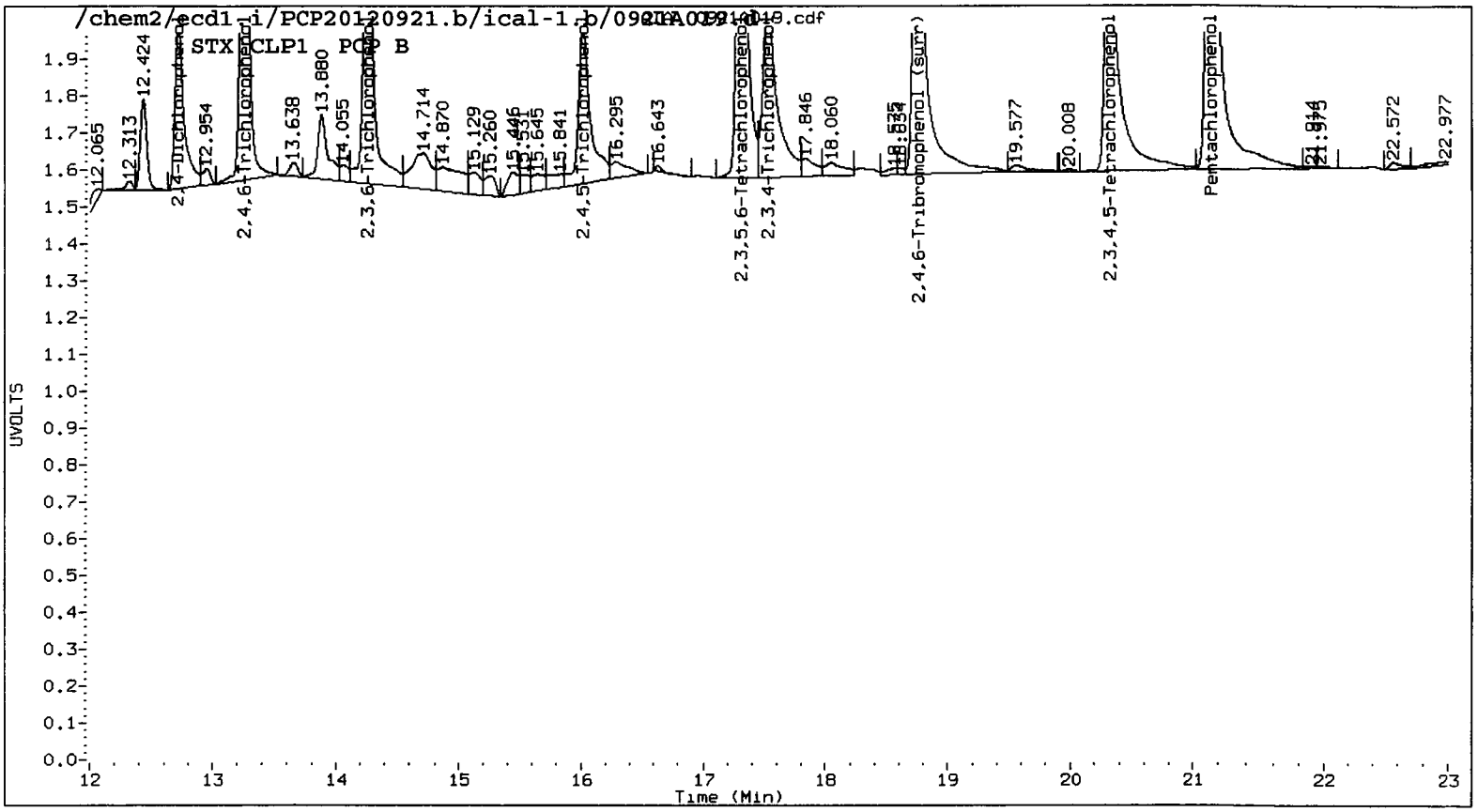
Data file 1: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A019.d ARI ID: PCP B
Data file 2: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A019.d Client ID:
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m
Compound Sublist: all
Instrument: ecd1.i
Operator: ar

Injection Date: 21-SEP-2012 20:41
Report Date: 09/25/2012 13:17
Matrix: WATER
Dilution Factor: 1.000

STX CLP1 Col RT	Shift	Response	STX CLP2 Col RT	Shift	Response	STX CLP1 on col	STX CLP2 on col	RPD	Compound
21.170	0.012	444389	22.897	0.009	248232	6.9775	6.9555	0.3	Pentachlorophenol
13.257	0.001	229955	14.266	0.002	208197	7.2194	8.0367	10.7	2,4,6-Trichlorophenol
14.258	0.004	258950	15.510	0.003	160501	6.6004	6.7302	1.9	2,3,6-Trichlorophenol
16.025	0.015	151202	17.434	0.011	84183	6.0981	4.7129	25.6	2,4,5-Trichlorophenol
17.541	0.022	193157	18.984	0.016	115678	6.5441	4.8936	28.9	2,3,4-Trichlorophenol
17.323	0.008	333721	18.759	0.007	196228	7.1015	6.7933	4.4	2,3,5,6-Tetrachlorophe
20.346	0.023	284477	22.029	0.017	147190	6.8997	7.1029	2.9	2,3,4,5-Tetrachlorophe
12.716	0.005	123823	13.782	0.004	93863	71.0044	78.4554	10.0	2,4-Dichlorophenol
18.776	0.013	359745	20.877	0.010	203256	6.9	6.7	1.8	2,4,6-Tribromophenol (s

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	27.5	27.0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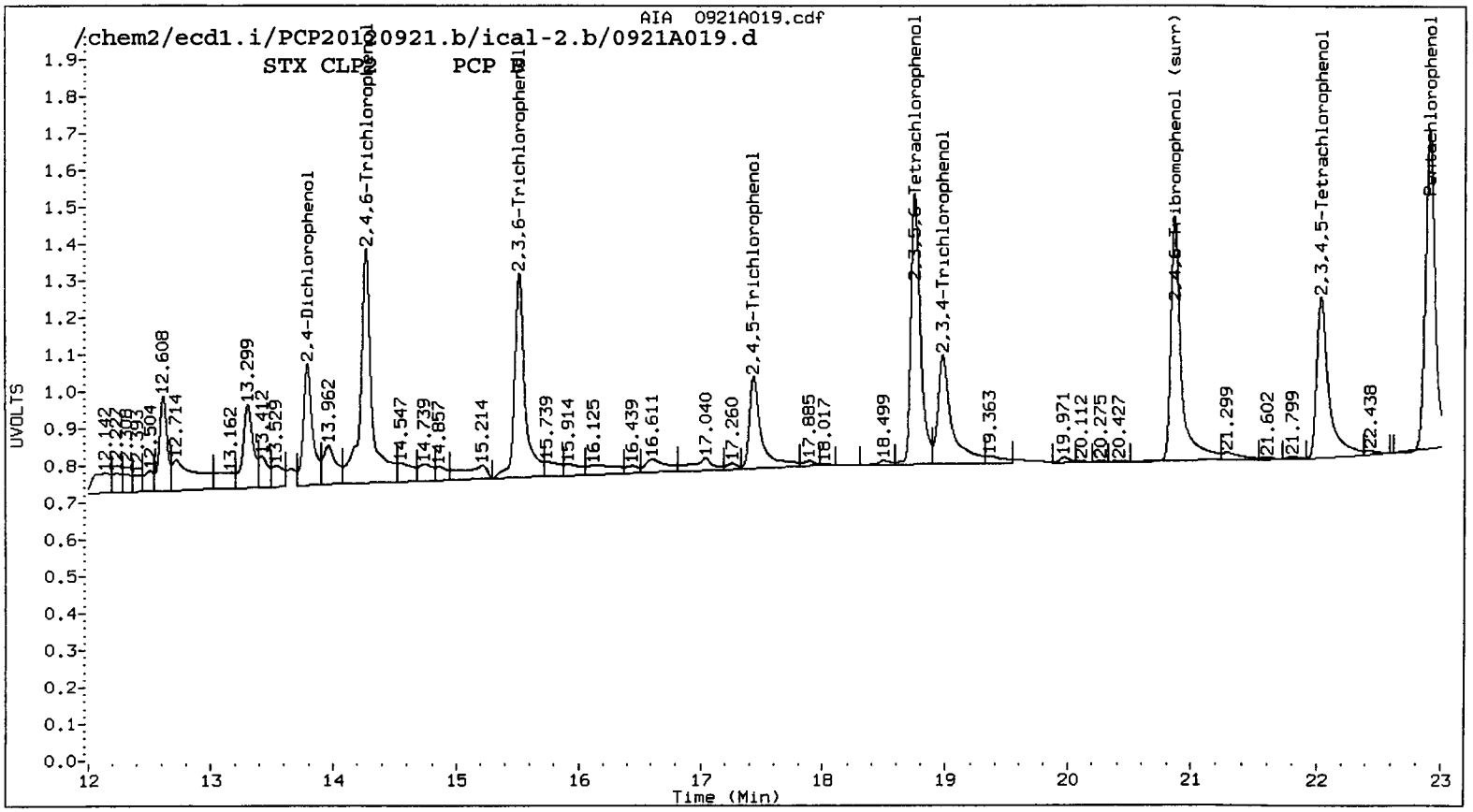
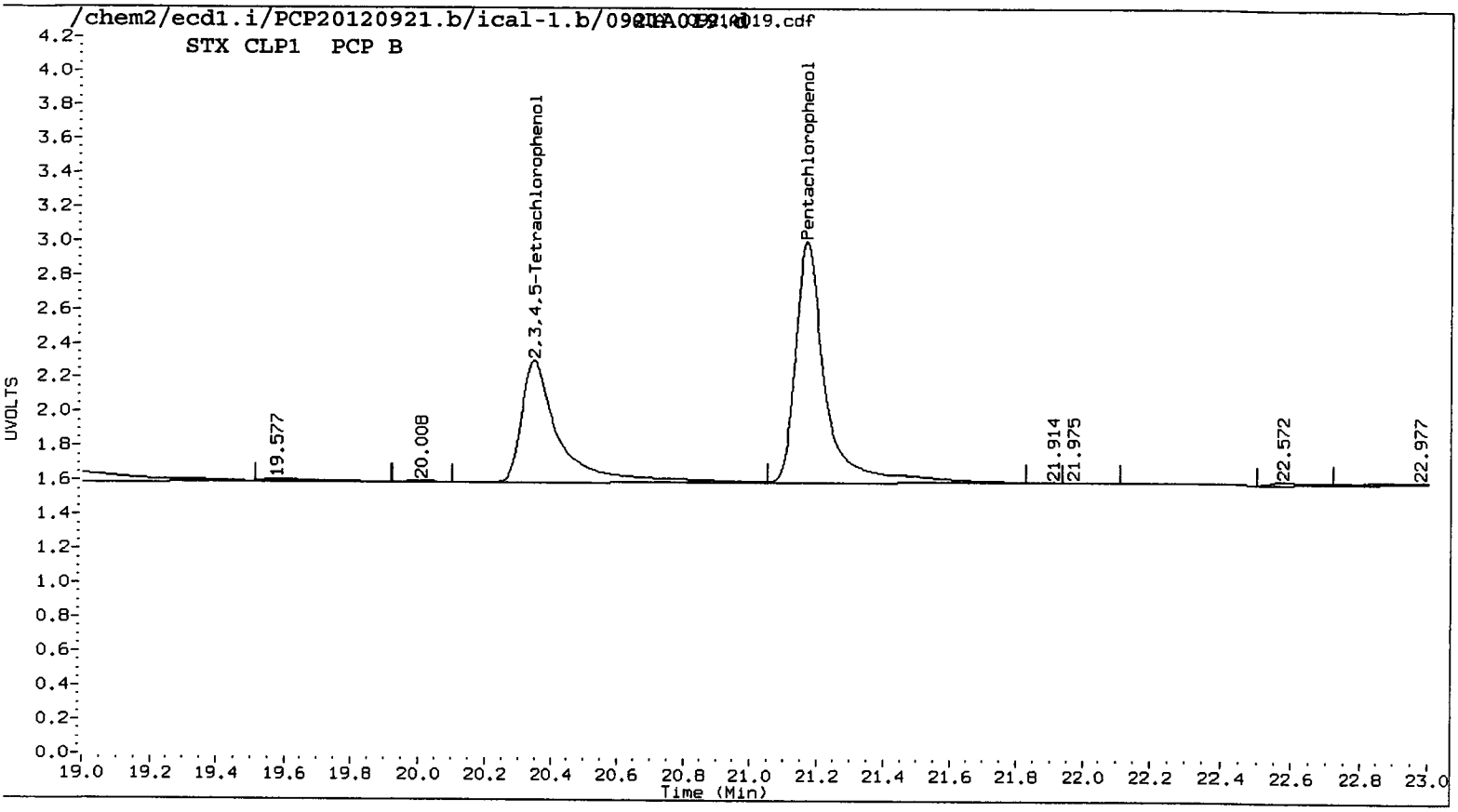
STX CLP1 PCP B
12.424
12.313
12.065
12.954
13.638
13.880
14.055
14.714
14.870
15.129
15.260
15.841
16.295
16.643
17.846
18.060
19.577
20.008
22.572
22.977
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)


AIA 0921A019.cdf
/chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A019.d
STX CLP2 PCP B
12.608
13.299
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)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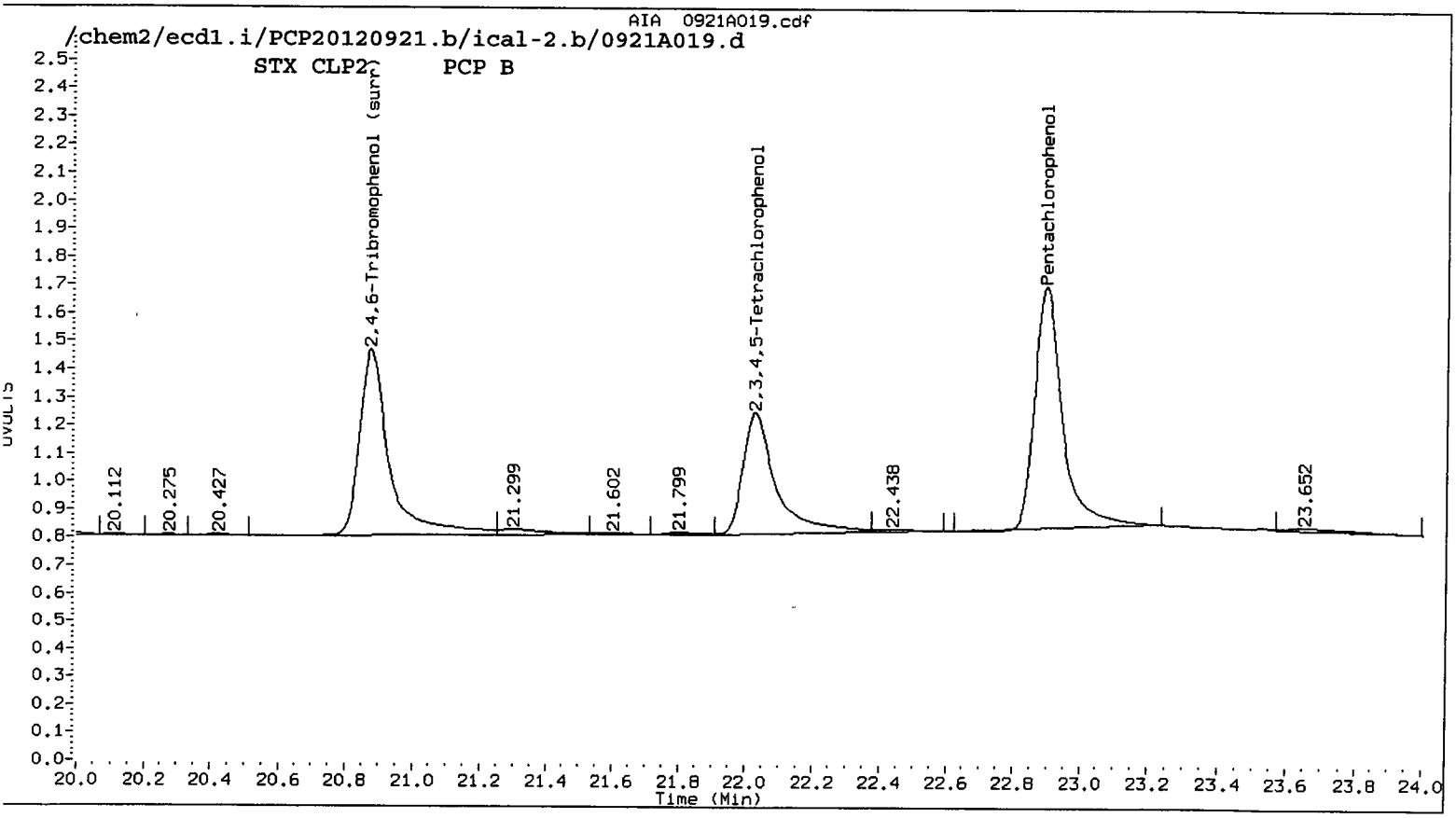
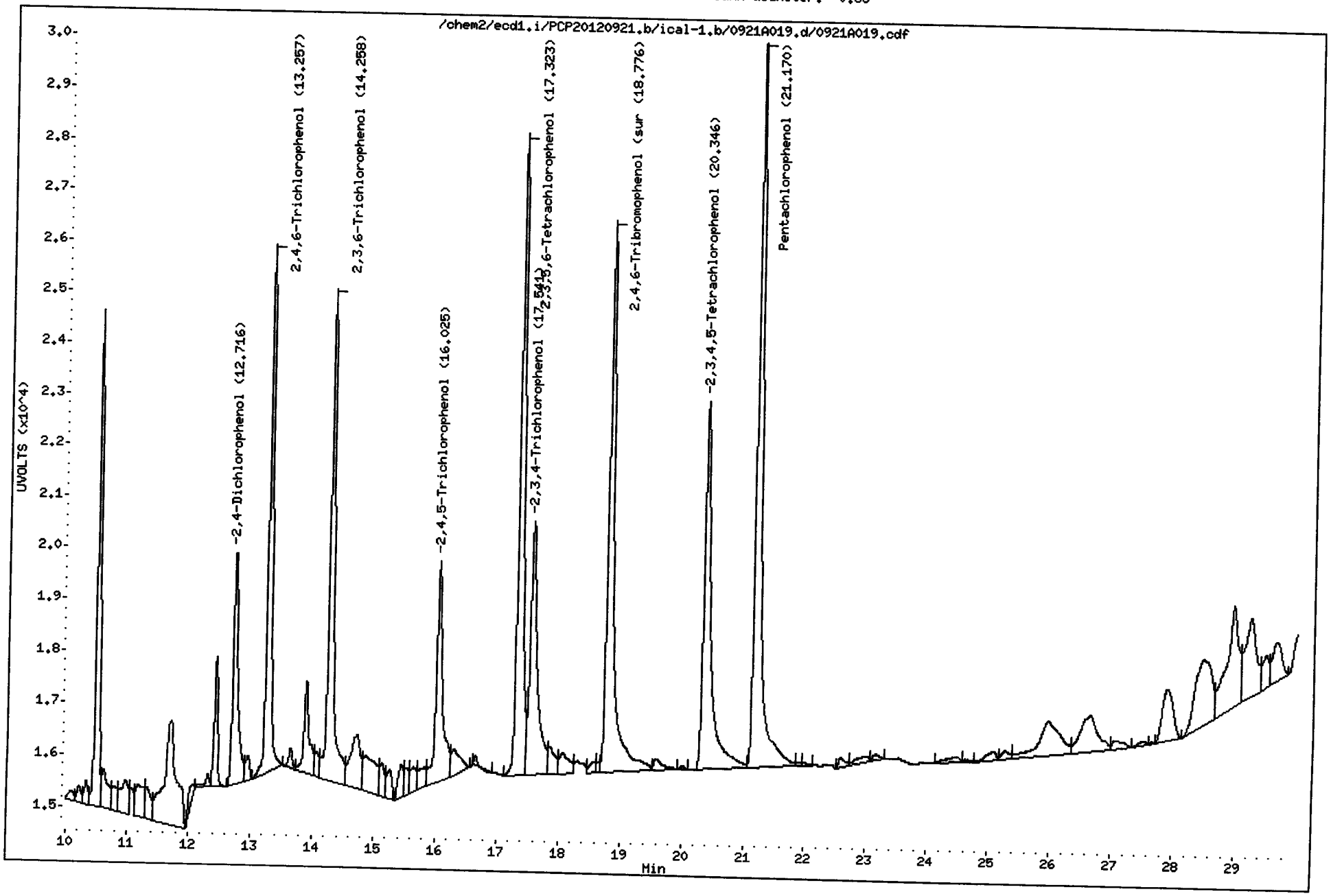
STX CLP1 PCP B
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.577
20.008
21.914
21.975
22.572
22.977
UVOLTS
Time (Min)


AIA 0921A019.cdf
/chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A019.d
STX CLP2 PCP B
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.112
20.275
20.427
21.299
21.602
21.799
22.438
23.652
Time (Min)

Data File: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A019.d
Date : 21-SEP-2012 20:41
Client ID:
Sample Info: PCP B
Purge Volume: 500.0
Column phase: STX CLP1

Instrument: ecd1.i
Operator: ar
Column diameter: 0.53



Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

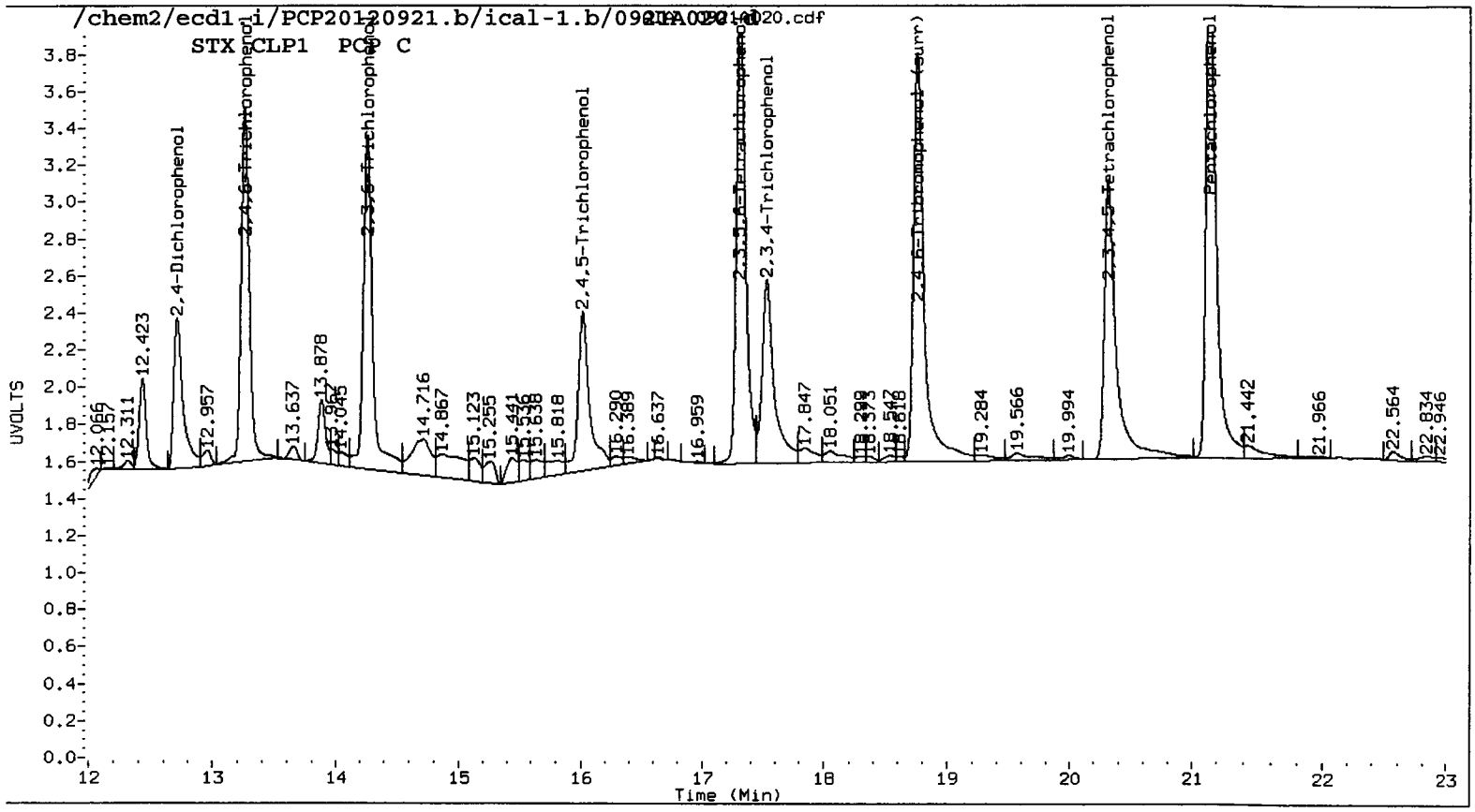
Data file 1: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A020.d ARI ID: PCP C
Data file 2: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A020.d Client ID:
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m
Compound Sublist: all
Instrument: ecd1.i
Operator: ar

Injection Date: 21-SEP-2012 21:17
Report Date: 09/25/2012 13:17
Matrix: WATER
Dilution Factor: 1.000

STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.163	0.005	779765	22.892	0.004	469083	12.6843	13.1437	3.6	Pentachlorophenol
13.256	0.000	430433	14.265	0.001	314632	13.5134	12.5299	7.6	2,4,6-Trichlorophenol
14.256	0.002	478158	15.508	0.001	300088	13.1359	13.3266	1.4	2,3,6-Trichlorophenol
16.015	0.005	284711	17.427	0.004	188136	12.6131	12.5093	0.8	2,4,5-Trichlorophenol
17.527	0.008	350554	18.974	0.006	230095	12.7445	11.5658	9.7	2,3,4-Trichlorophenol
17.318	0.003	630342	18.754	0.002	388236	13.4136	13.4405	0.2	2,3,5,6-Tetrachlorophe
20.331	0.008	520404	22.019	0.007	273735	13.2689	13.2095	0.4	2,3,4,5-Tetrachlorophe
12.713	0.002	219893	13.780	0.002	142277	131.1224	125.2571	4.6	2,4-Dichlorophenol
18.768	0.005	655694	20.870	0.003	408156	13.0	13.5	3.7	2,4,6-Tribromophenol (s

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	52.2	54.1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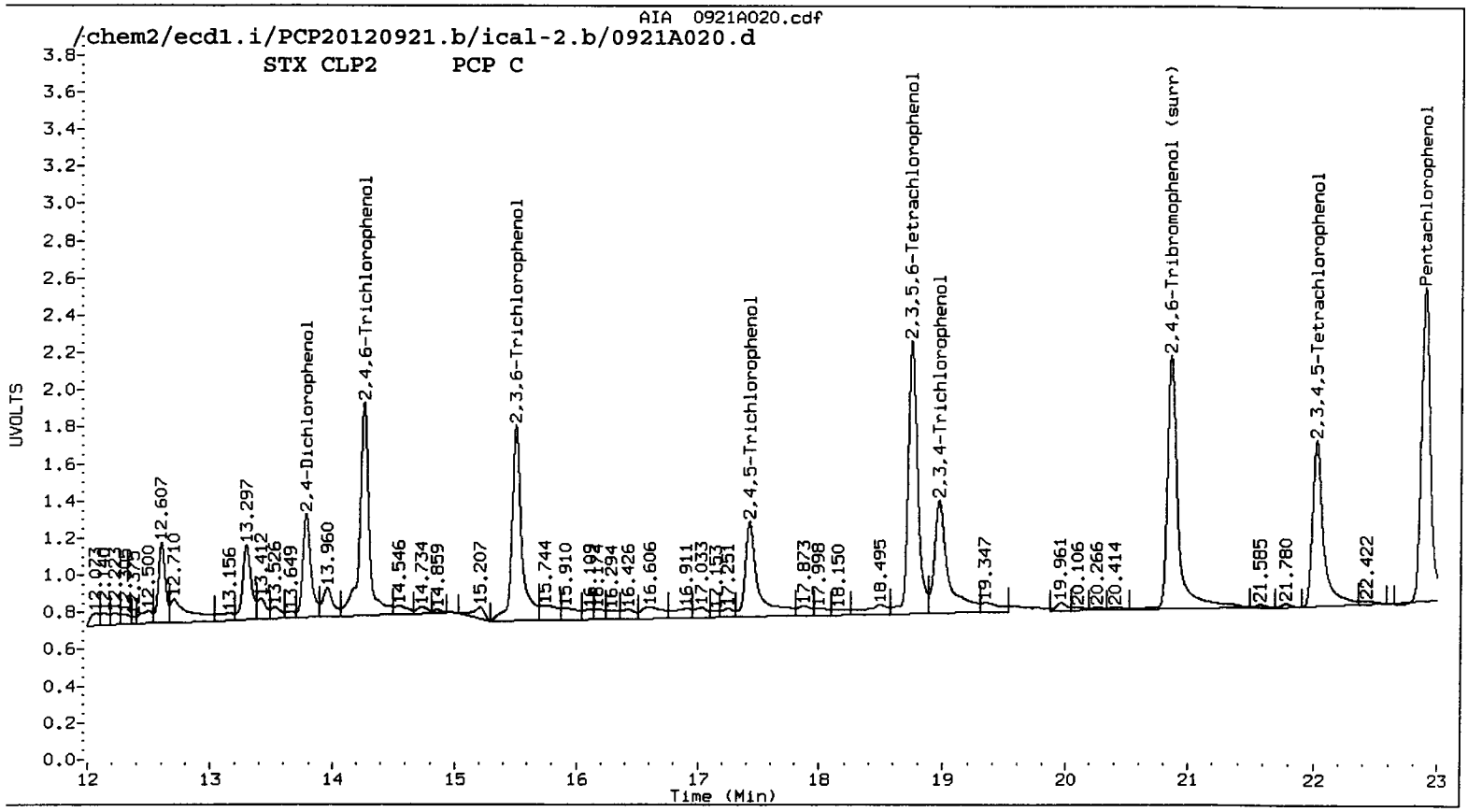
STX CLP1 PCP C
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)


AIA 0921A020.cdf
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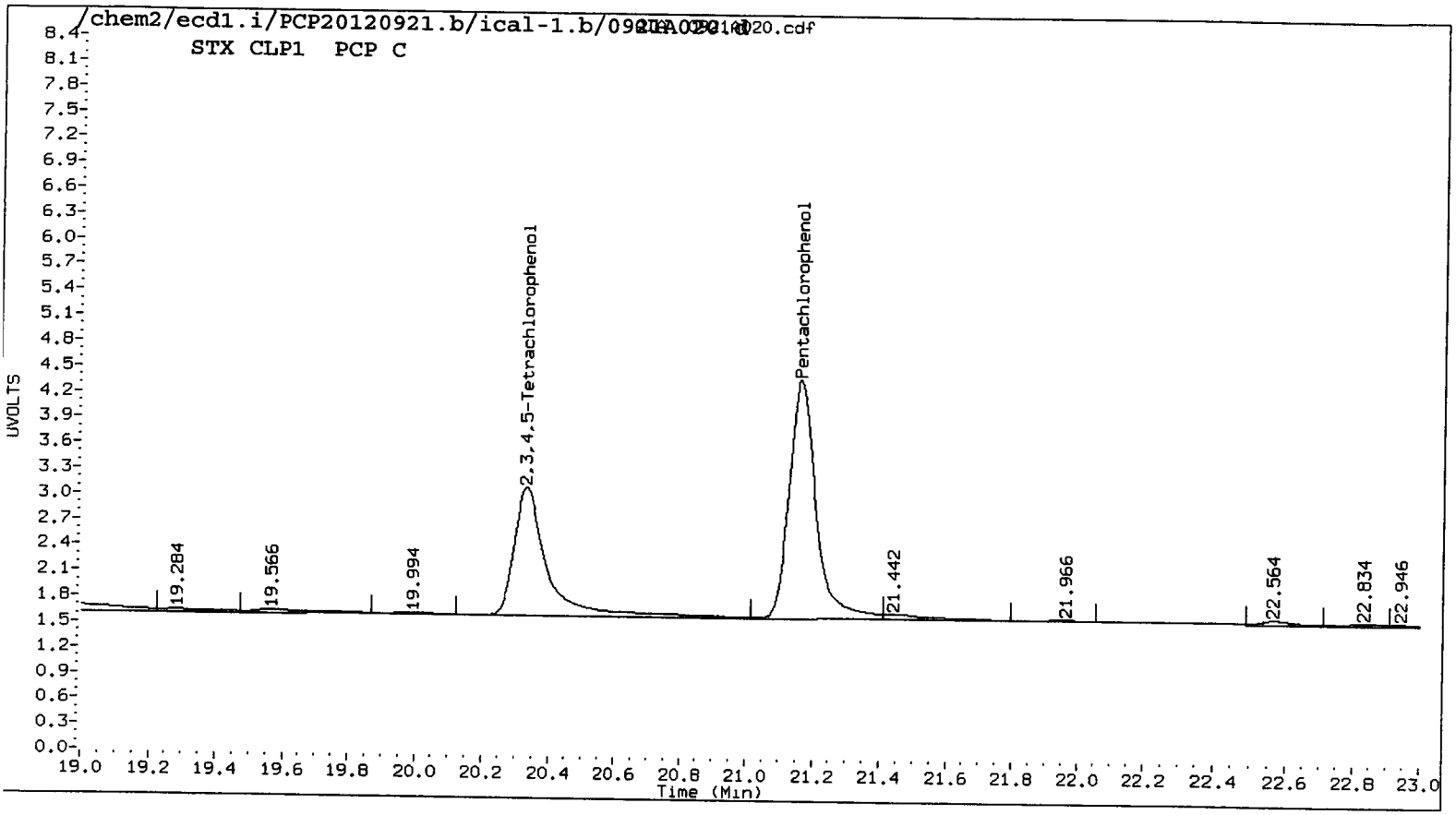
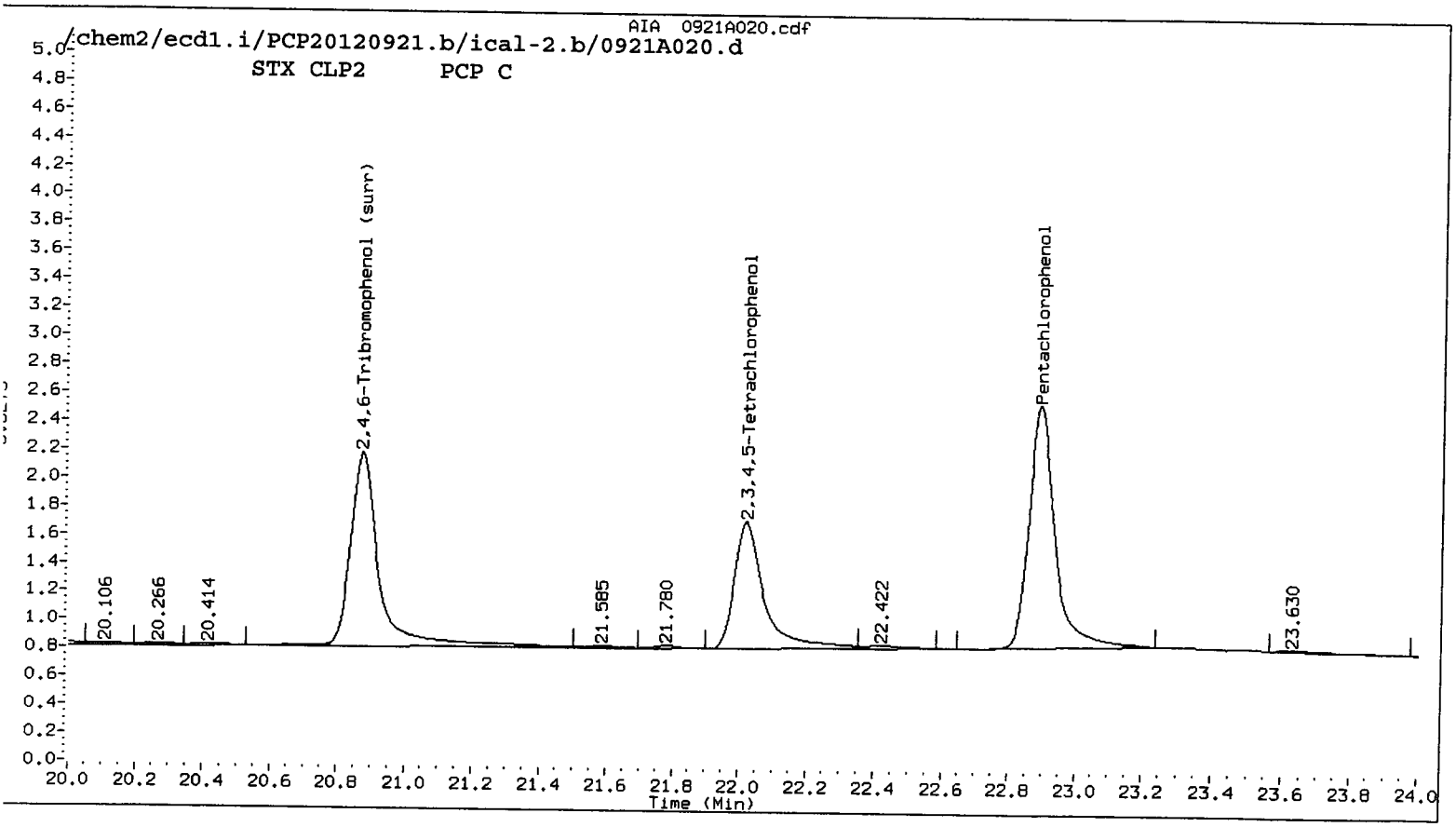
STX CLP2 PCP C
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
UVOLTS
Time (Min)


/chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A020.d
AIA 0921A020.cdf
STX CLP1 PCP C
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.284
19.566
19.994
21.442
21.966
22.564
22.834
22.946
Time (Min)


/chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A020.d
AIA 0921A020.cdf
STX CLP2 PCP C
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.106
20.266
20.414
21.585
21.780
22.422
23.630
Time (Min)

Data File: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A020.d

Date : 21-SEP-2012 21:17

Client ID:

Sample Info: PCP C

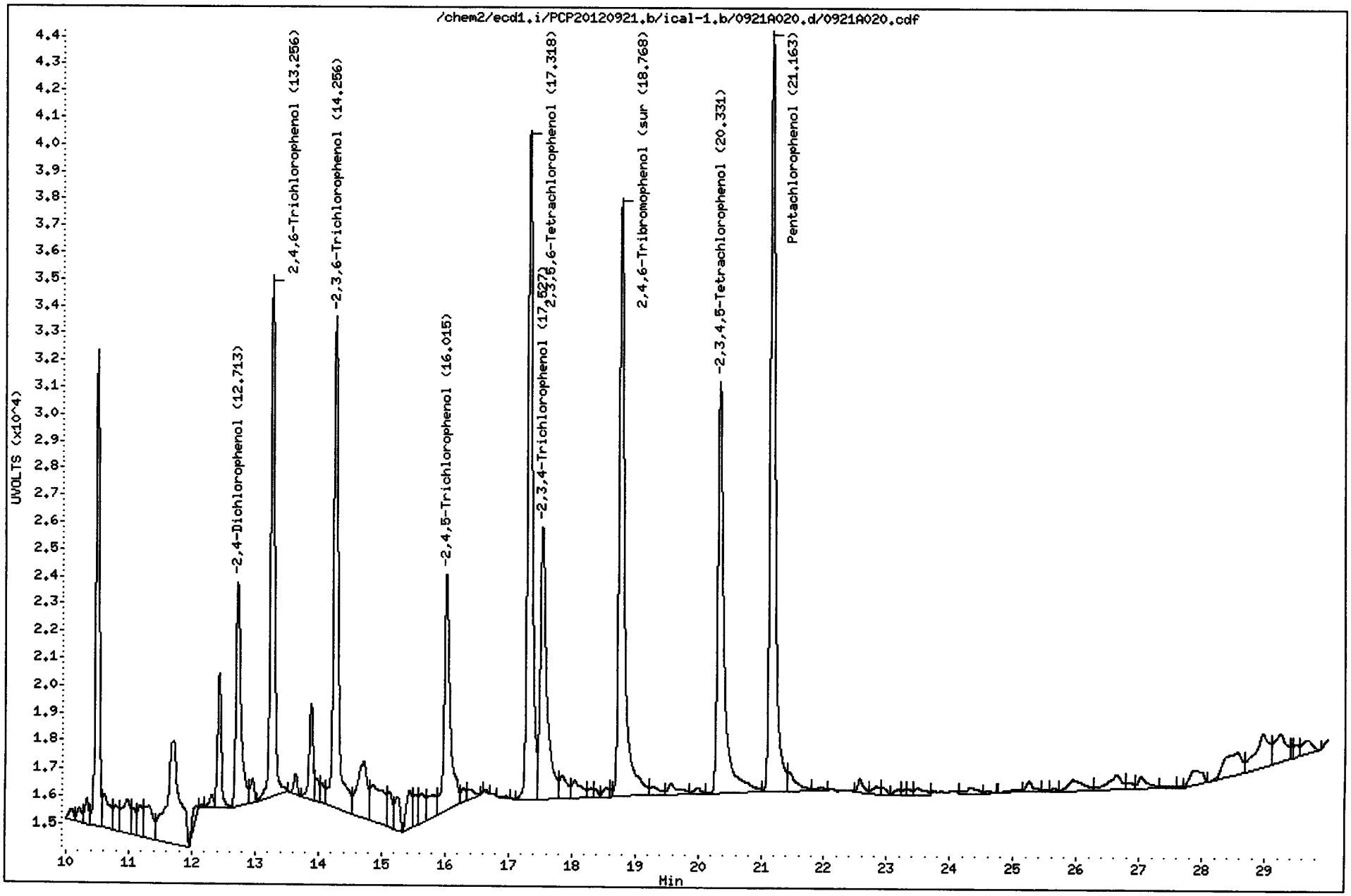
Purge Volume: 500.0

Column phase: STX CLP1

Instrument: ecd1.i

Operator: ar

Column diameter: 0.53



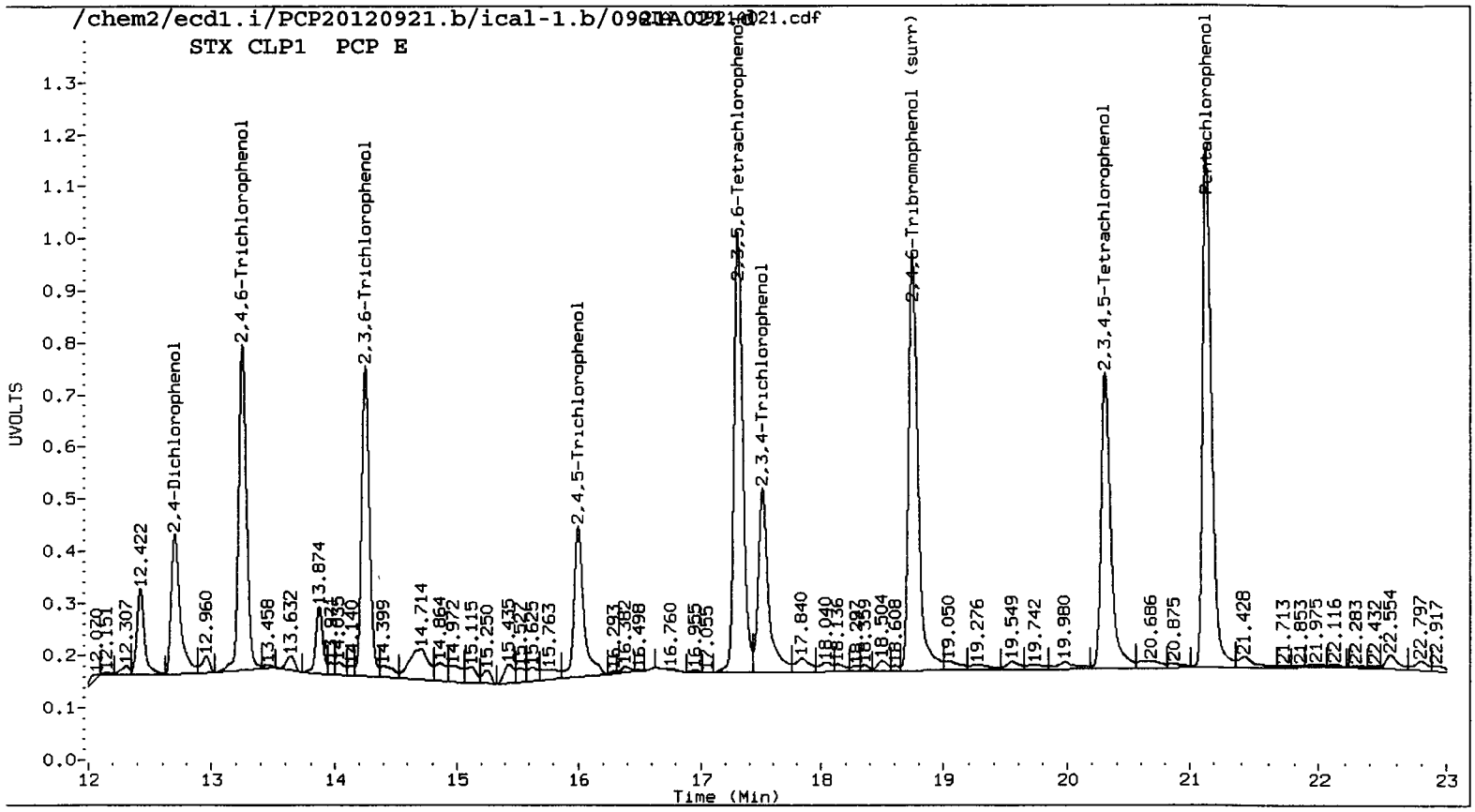
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

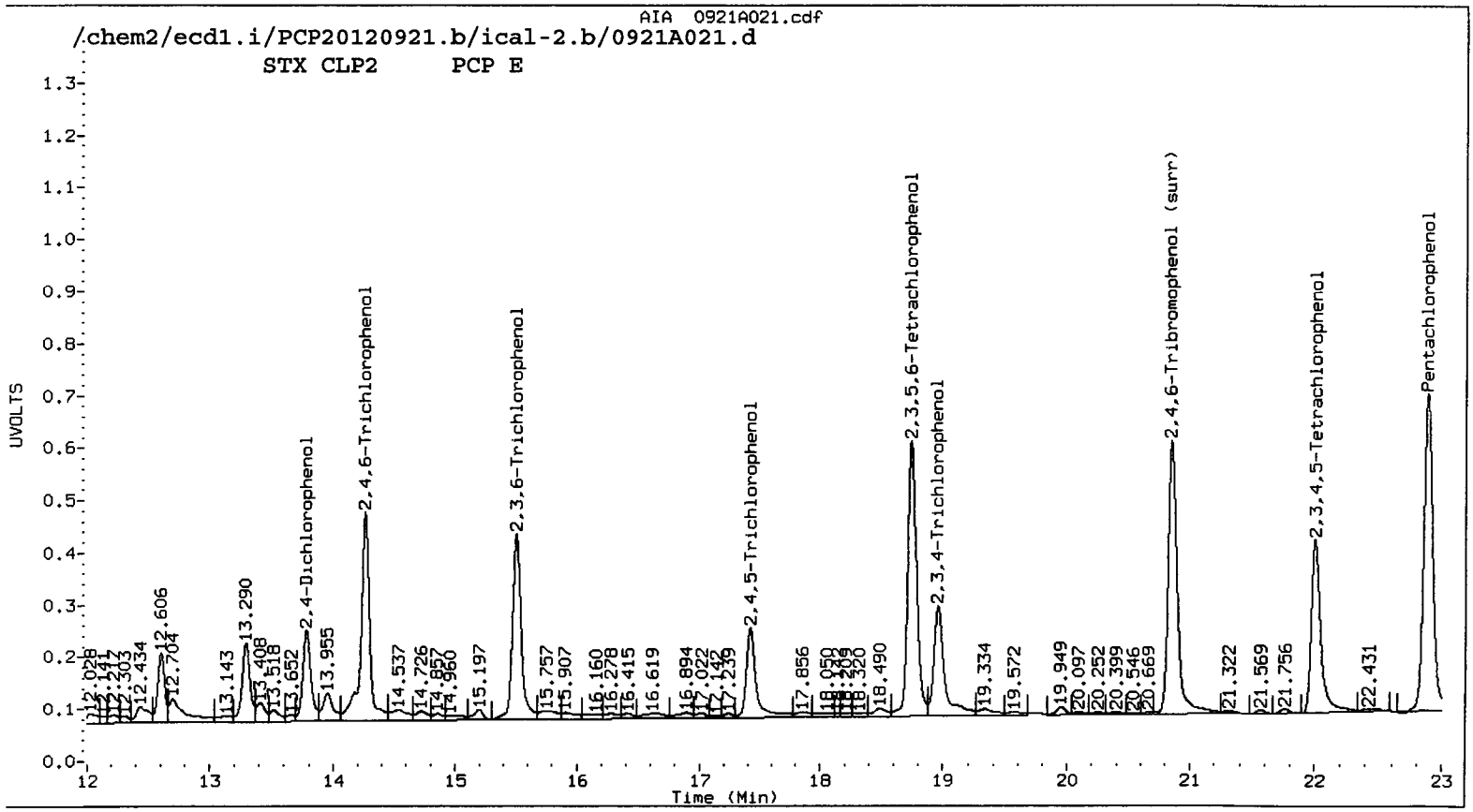
Data file 1: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A021.d ARI ID: PCP E
Data file 2: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A021.d Client ID:
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 21-SEP-2012 21:53
Compound Sublist: all Report Date: 09/25/2012 13:17
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

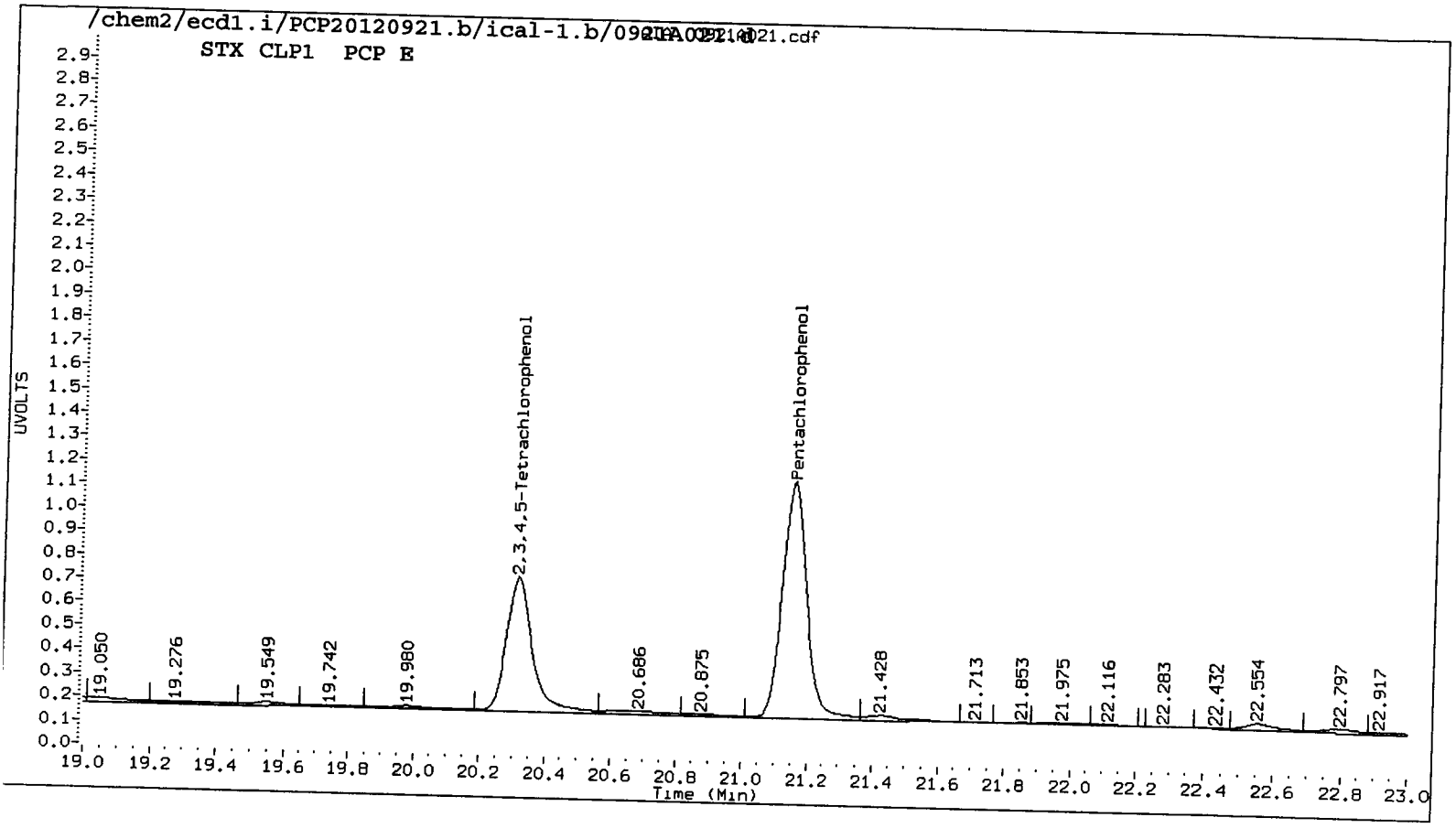
STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.153	-0.005	2579984	22.884	-0.004	1581355	49.8006	44.3095	11.7	Pentachlorophenol
13.254	-0.002	1378613	14.261	-0.003	1046878	43.2813	50.4949	15.4	2,4,6-Trichloropheno
14.251	-0.003	1360198	15.504	-0.003	891000	48.2202	48.9096	1.4	2,3,6-Trichlorophenol
16.003	-0.007	828590	17.418	-0.005	509875	50.1100	50.4830	0.7	2,4,5-Trichlorophenol
17.511	-0.008	1050439	18.961	-0.007	654702	49.7537	52.2530	4.9	2,3,4-Trichlorophenol
17.311	-0.004	2092823	18.748	-0.004	1303311	44.5349	45.1198	1.3	2,3,5,6-Tetrachlorop
20.314	-0.009	1585782	22.006	-0.006	902939	49.3364	43.5727	12.4	2,3,4,5-Tetrachloroph
12.707	-0.004	695219	13.775	-0.003	438585	493.2130	505.6351	2.5	2,4-Dichlorophenol
18.757	-0.006	2092155	20.863	-0.004	1376359	49.7	45.6	8.5	2,4,6-Tribromophenol

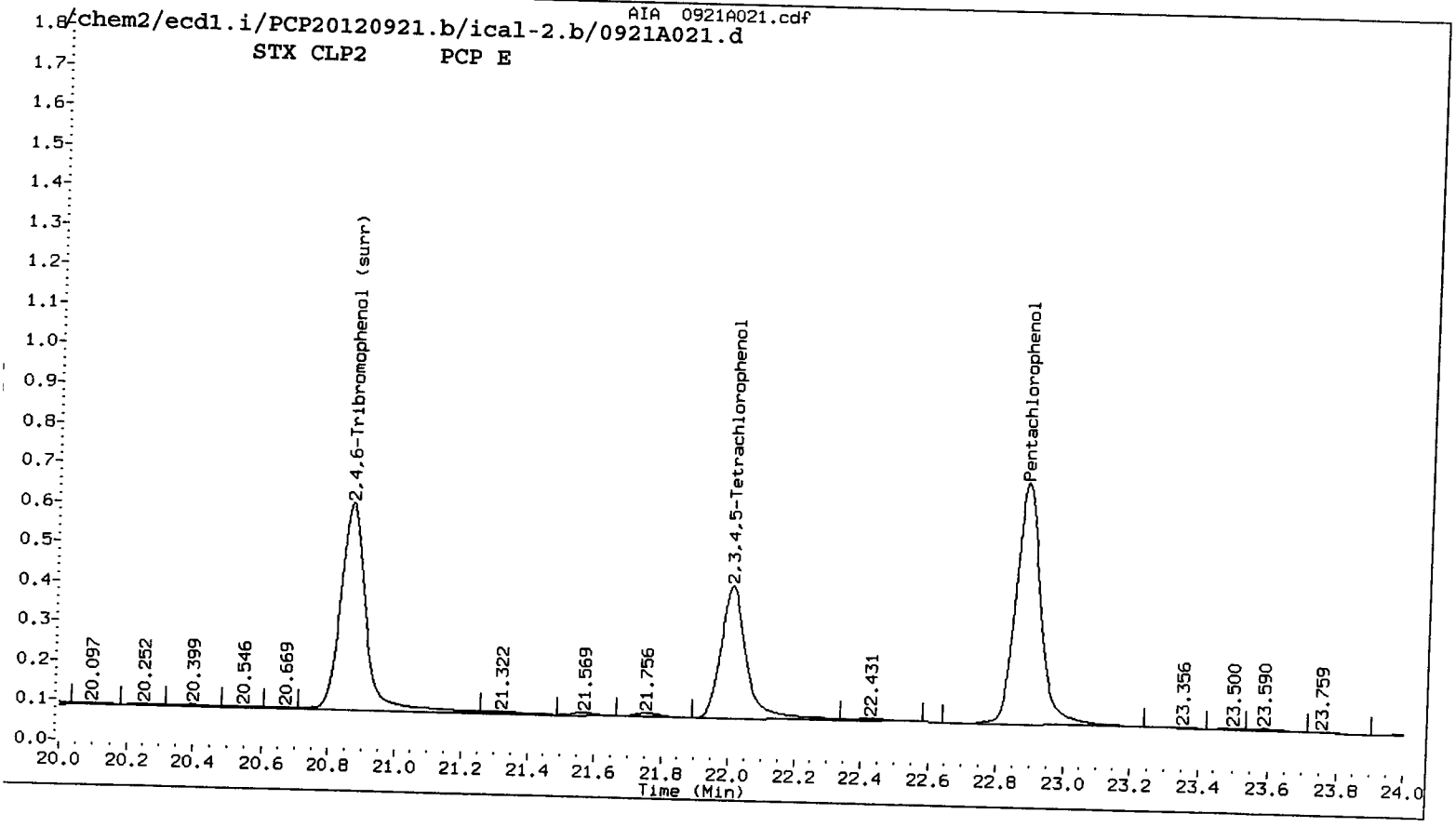
PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	198.9	182.6


/chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A021.cdf
STX CLP1 PCP E
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol

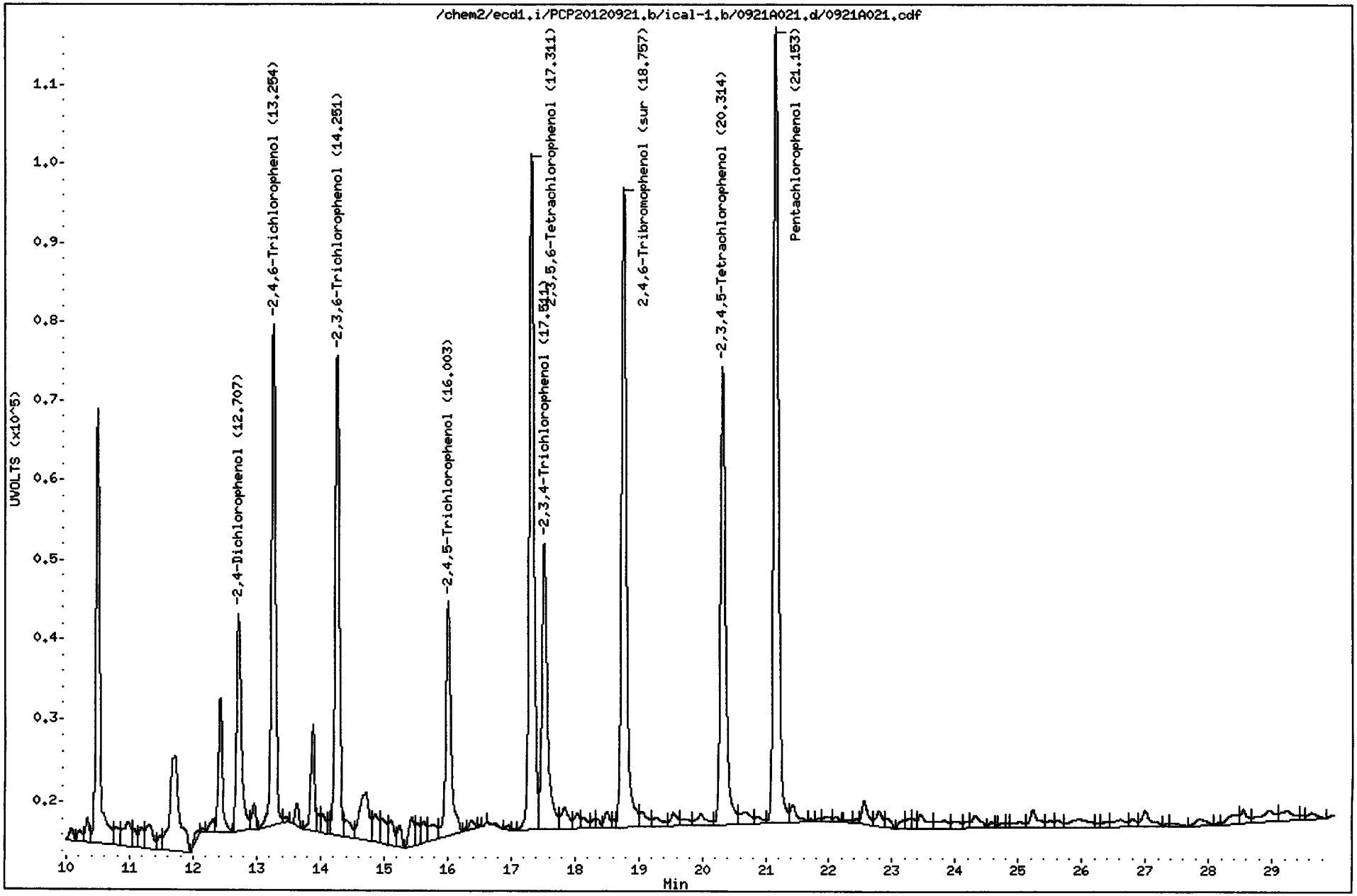

AIA 0921A021.cdf
/chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A021.d
STX CLP2 PCP E
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol


/chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A021.d
AIA 0921A021.cdf
STX CLP1 PCP E
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.050
19.276
19.549
19.742
19.980
20.686
20.875
21.428
21.713
21.853
21.975
22.116
22.283
22.432
22.554
22.797
22.917
Time (Min)


/chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A021.d
AIA 0921A021.cdf
STX CLP2 PCP E
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.097
20.252
20.399
20.546
20.669
21.322
21.569
21.756
22.431
23.356
23.500
23.590
23.759
Time (Min)

Data File: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A021.d
Date : 21-SEP-2012 21:53
Client ID:
Sample Info: PCP E
Purge Volume: 500.0
Column phase: STX CLP1

Instrument: ecd1.i
Operator: ar
Column diameter: 0.53



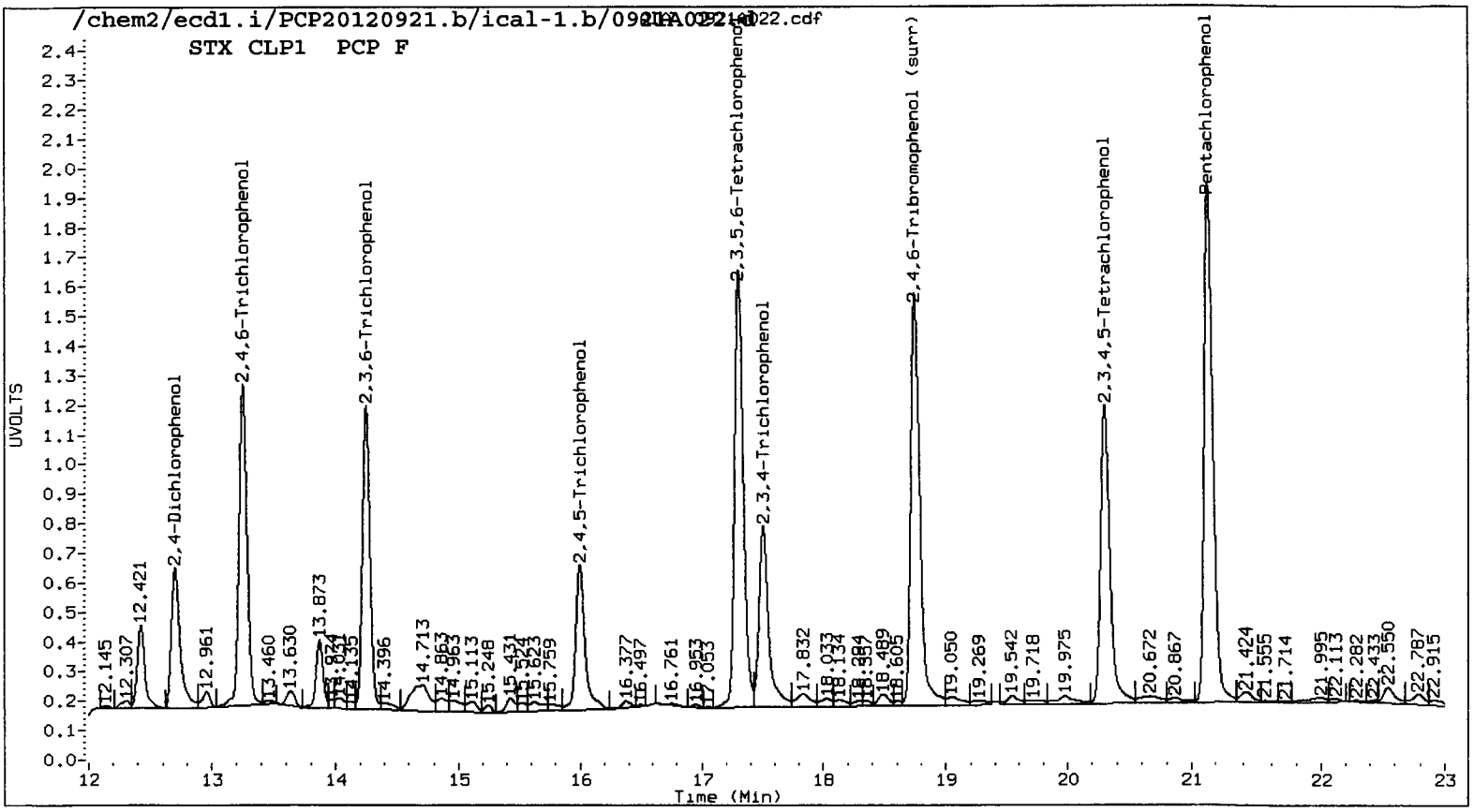
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

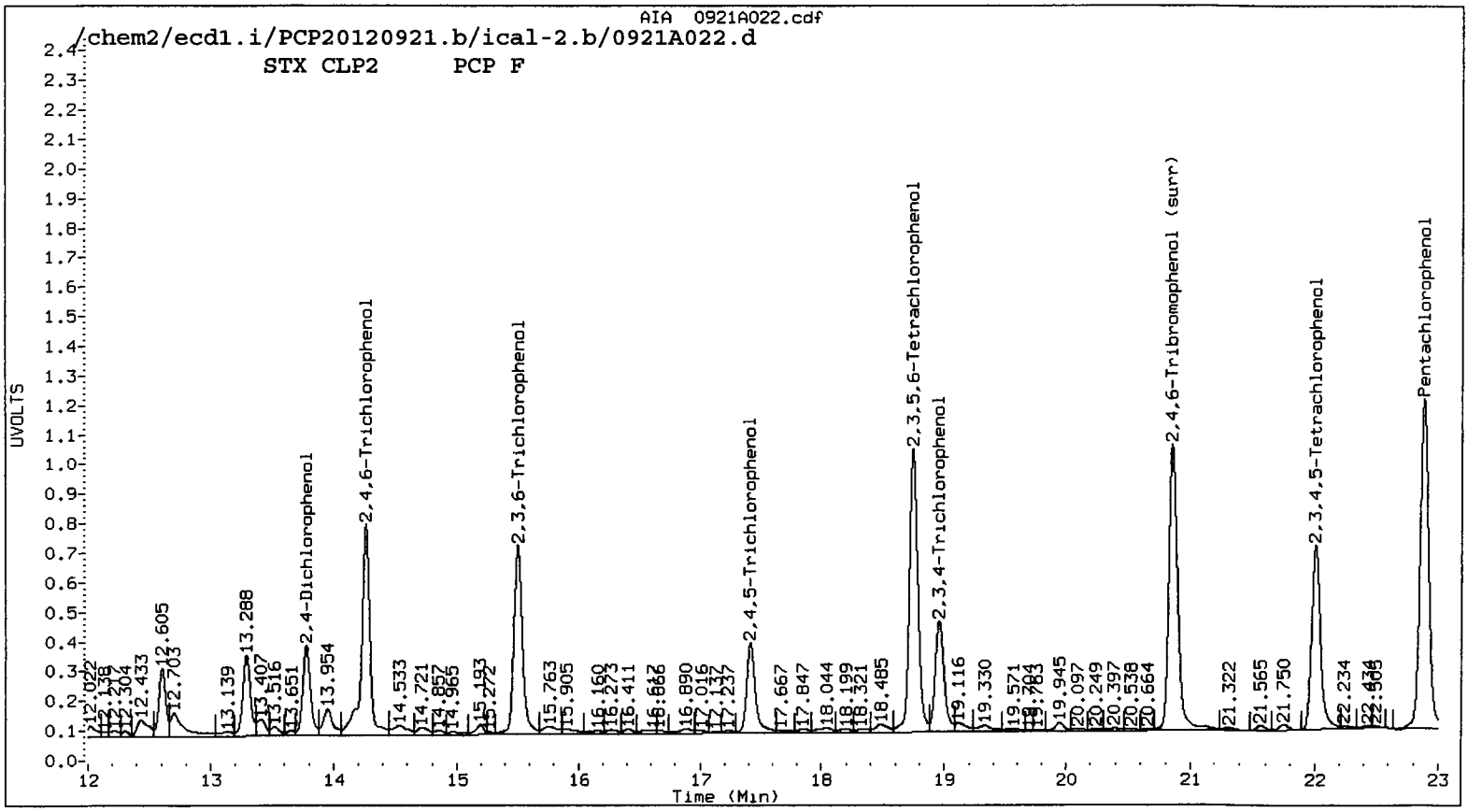
Data file 1: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A022.d ARI ID: PCP F
Data file 2: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A022.d Client ID:
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 21-SEP-2012 22:30
Compound Sublist: all Report Date: 09/25/2012 13:17
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

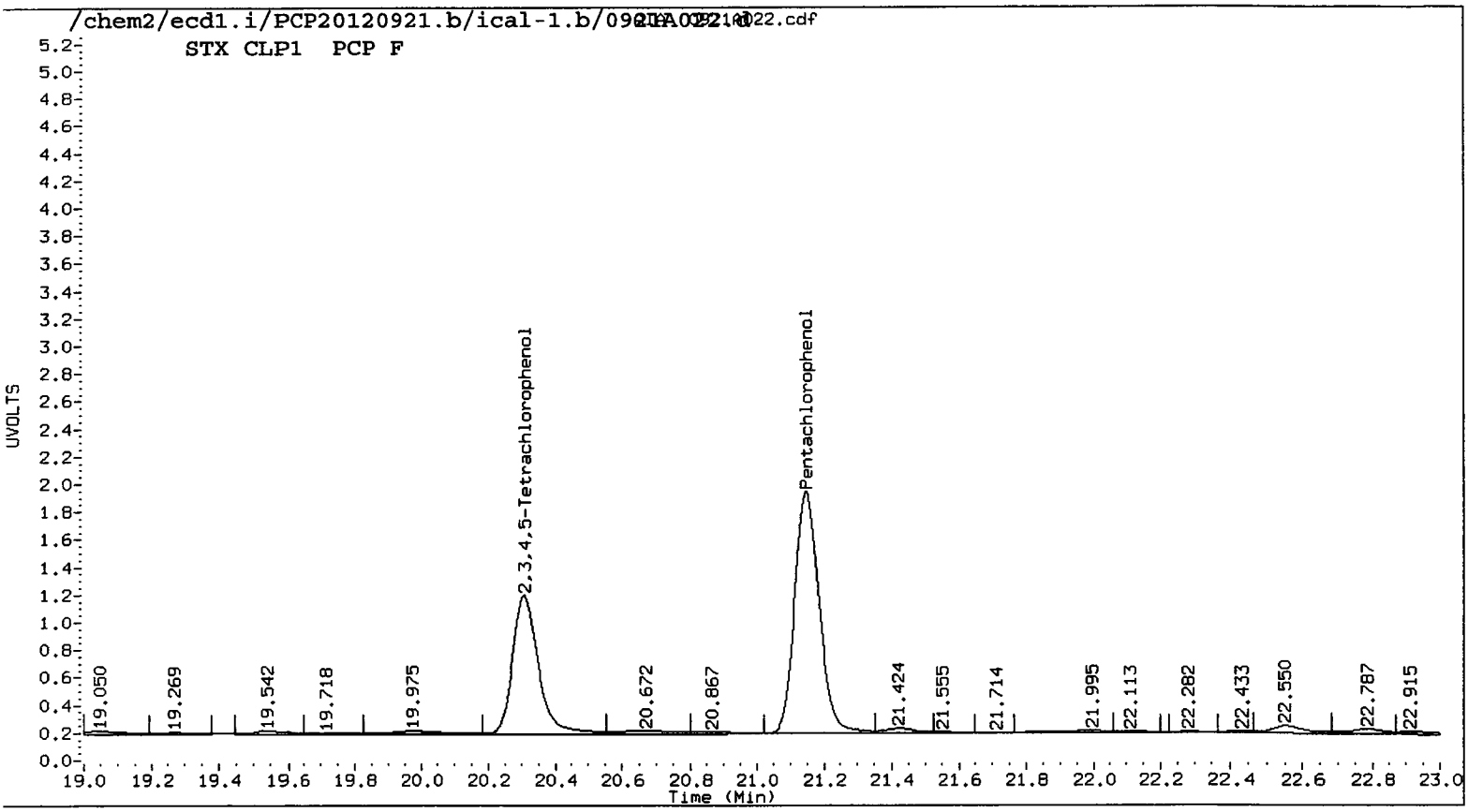
STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.149	-0.009	4455069	22.882	-0.006	2798545	100.0821	78.4151	24.3	Pentachlorophenol
13.252	-0.004	2381933	14.259	-0.005	1768391	74.7804	99.9503	28.8	2,4,6-Trichloropheno
14.249	-0.005	2289663	15.502	-0.005	1518853	100.4218	100.2932	0.1	2,3,6-Trichlorophen
15.999	-0.011	1327374	17.414	-0.009	786042	99.9642	99.7678	0.2	2,4,5-Trichlorophenol
17.506	-0.013	1725987	18.957	-0.011	972757	100.0920	99.1667	0.9	2,3,4-Trichlorophenol
17.307	-0.008	3620738	18.746	-0.006	2314935	77.0486	80.1416	3.9	2,3,5,6-Tetrachlorop
20.308	-0.015	2706943	22.003	-0.009	1567510	100.2112	75.6425	27.9	2,3,4,5-Tetrachlorop
12.706	-0.005	1205949	13.773	-0.005	711683	1002.1393	999.2285	0.3	2,4-Dichlorophenol
18.753	-0.010	3597466	20.861	-0.006	2474892	100.1	82.1	19.8	2,4,6-Tribromophenol

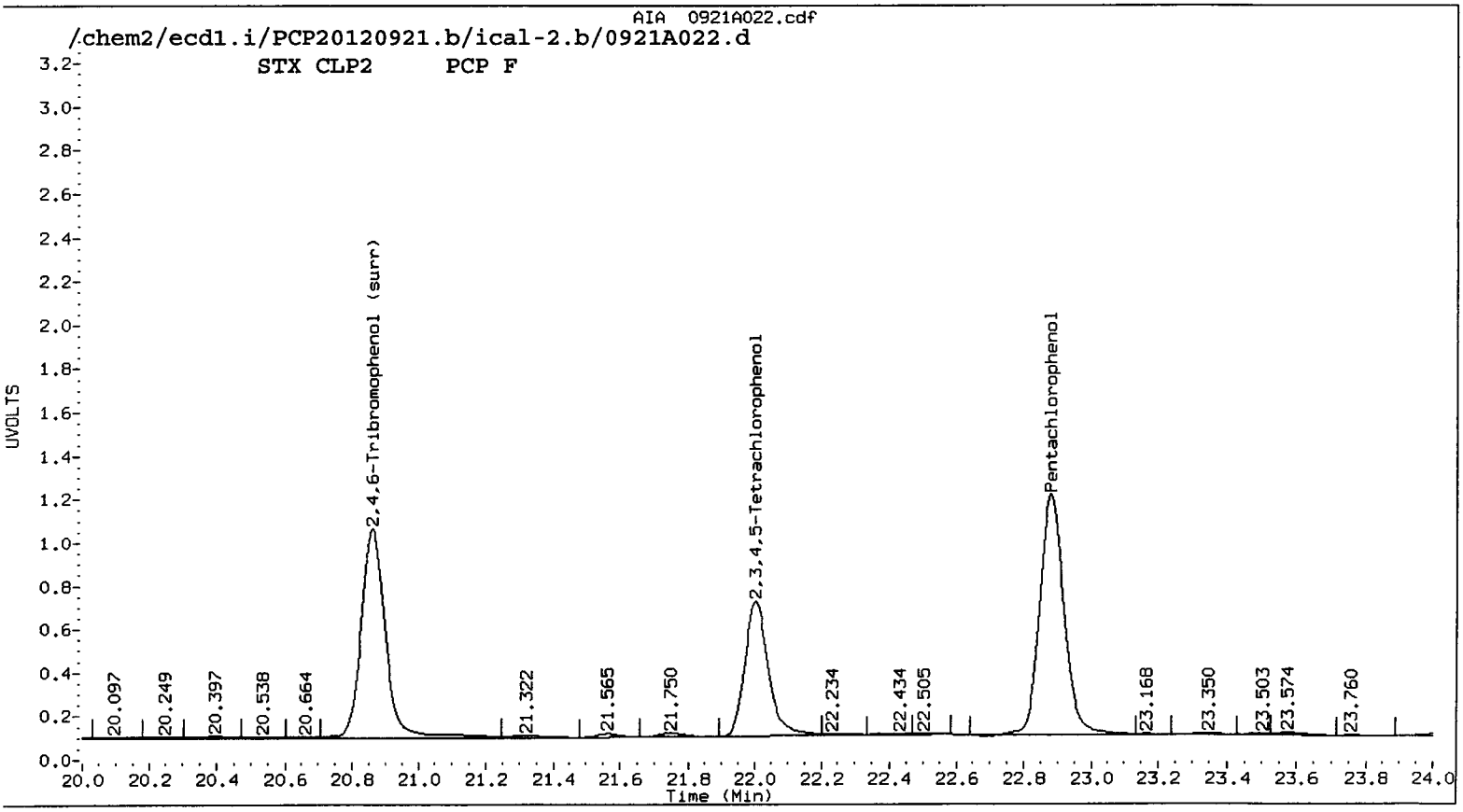
PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	400.4	328.3


/chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A022.d
AIA 0921A022.cdf
STX CLP1 PCP F
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol


AIA 0921A022.cdf
/chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A022.d
STX CLP2 PCP F
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol


/chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A022.d
STX CLP1 PCP F
UVOLTS
Time (Min)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.050
19.269
19.542
19.718
19.975
20.672
20.867
21.424
21.555
21.714
21.995
22.113
22.282
22.433
22.550
22.787
22.915


AIA 0921A022.cdf
/chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A022.d
STX CLP2 PCP F
UVOLTS
Time (Min)
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.097
20.249
20.397
20.538
20.664
21.322
21.565
21.750
22.234
22.434
22.505
23.168
23.350
23.503
23.574
23.760

Data File: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A022.d

Date : 21-SEP-2012 22:30

Client ID:

Sample Info: PCP F

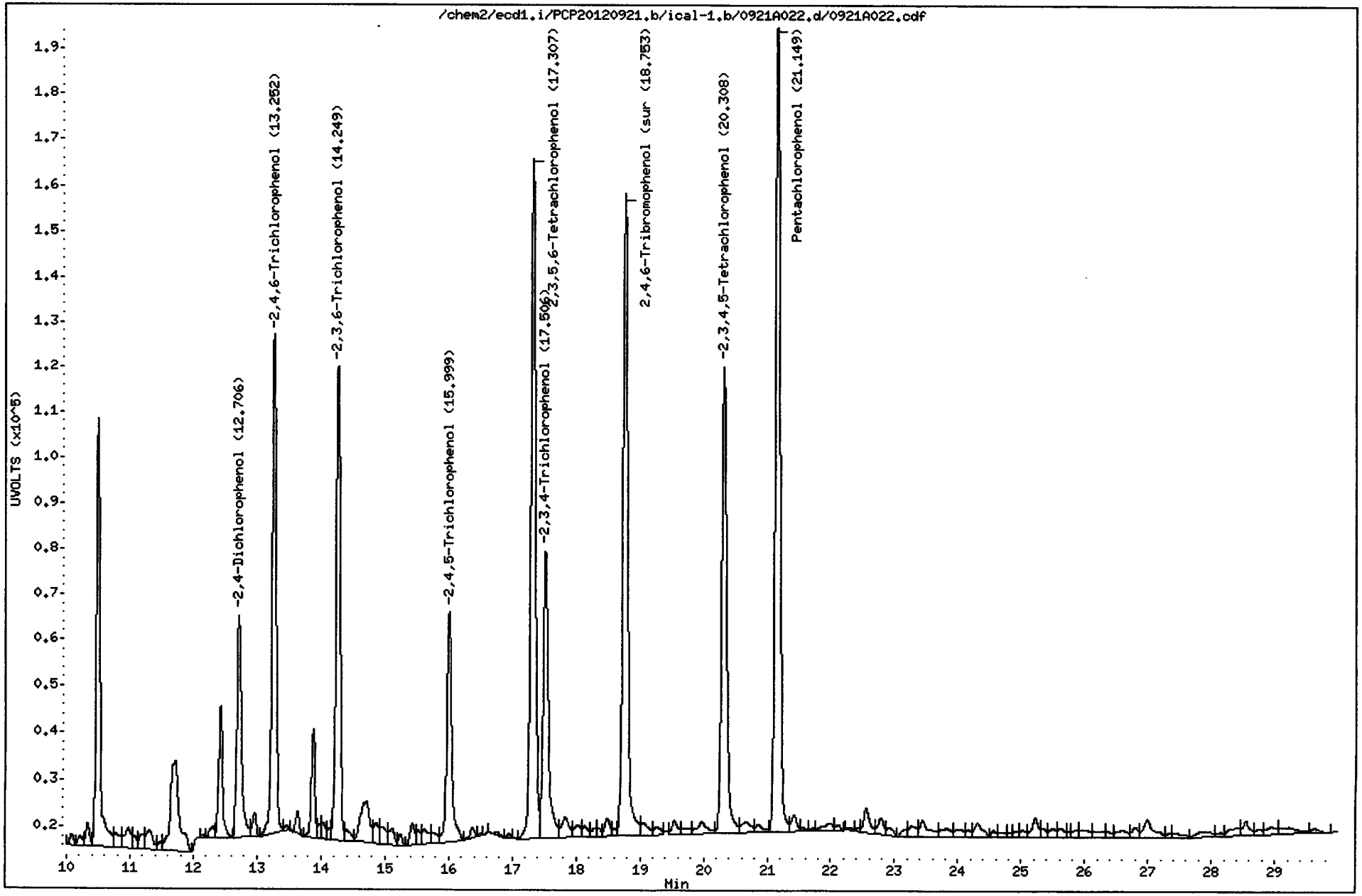
Purge Volume: 500.0

Column phase: STX CLP1

Instrument: ecd1.i

Operator: ar

Column diameter: 0.53



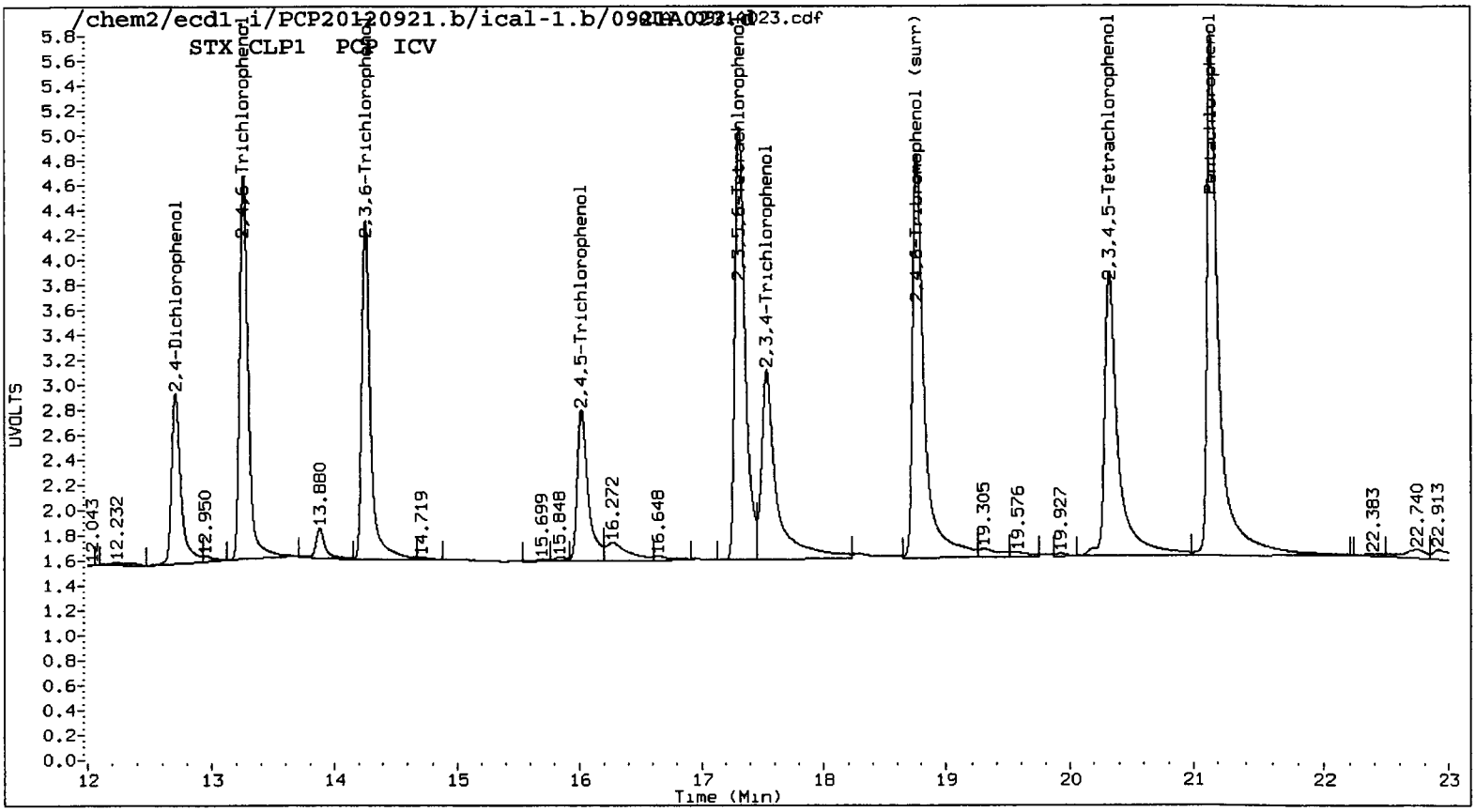
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A023.d ARI ID: PCP ICV
Data file 2: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A023.d Client ID:
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 21-SEP-2012 23:06
Compound Sublist: all Report Date: 09/26/2012 09:48
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.169	0.011	1357525	22.896	0.008	737814	23.4053	20.6735	12.4	Pentachlorophenol
13.257	0.001	719668	14.264	0.000	486197	22.5938	20.3203	10.6	2,4,6-Trichlorophenol
14.257	0.003	693796	15.510	0.003	448159	20.4133	21.0796	3.2	2,3,6-Trichlorophenol
16.024	0.014	375368	17.433	0.010	252070	17.6414	18.3892	4.2	2,4,5-Trichlorophenol
17.540	0.021	645984	18.982	0.014	387901	26.4870	23.7575	10.9	2,3,4-Trichlorophenol
17.324	0.009	943248	18.759	0.007	557301	20.0721	19.2934	4.0	2,3,5,6-Tetrachlorophe
20.340	0.017	850177	22.024	0.012	442020	23.1547	21.3303	8.2	2,3,4,5-Tetrachlorophe
12.710	-0.002	362932	13.779	0.001	244804	228.7729	238.6019	4.2	2,4-Dichlorophenol
18.780	0.017	1048704	20.878	0.011	642772	22.0	21.3	3.0	2,4,6-Tribromophenol (

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	93.6	82.7
2,4,6-Trichlorophenol	90.4	81.3
2,3,6-Trichlorophenol	81.7	84.3
2,4,5-Trichlorophenol	70.6	73.6
2,3,4-Trichlorophenol	105.9	95.0
2,3,5,6-Tetrachlorophenol	80.3	77.2
2,3,4,5-Tetrachlorophenol	92.6	85.3
2,4-Dichlorophenol	91.5	95.4
2,4,6-TBP (surr)	~~43.9~~ 87.8	~~42.6~~ 85.2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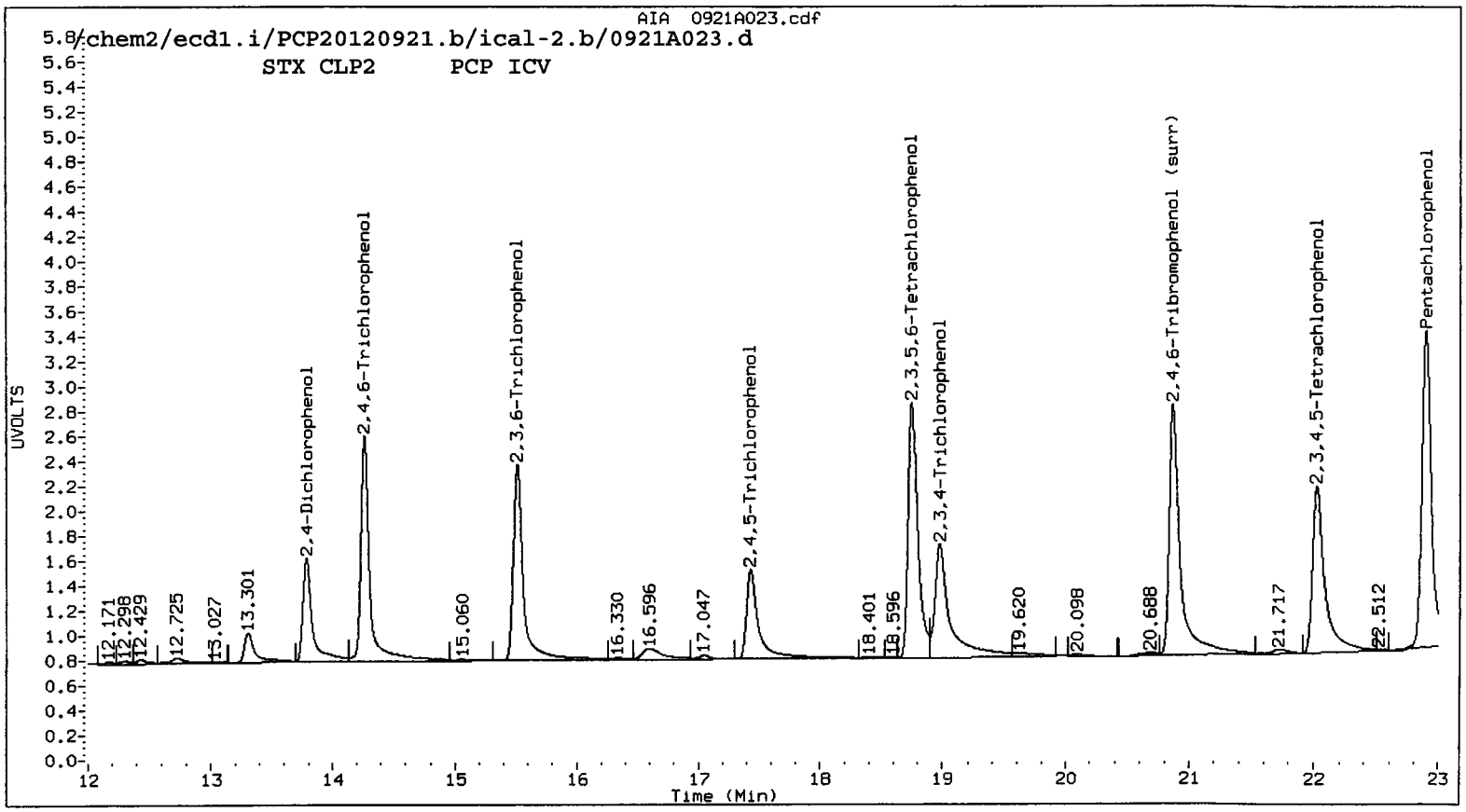
STX CLP1 PCP ICV
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
12.043
12.232
12.950
13.880
14.719
15.699
15.848
16.272
16.648
19.305
19.576
19.927
22.383
22.740
22.913
UVOLTS
Time (Min)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STX CLP2 PCP ICV
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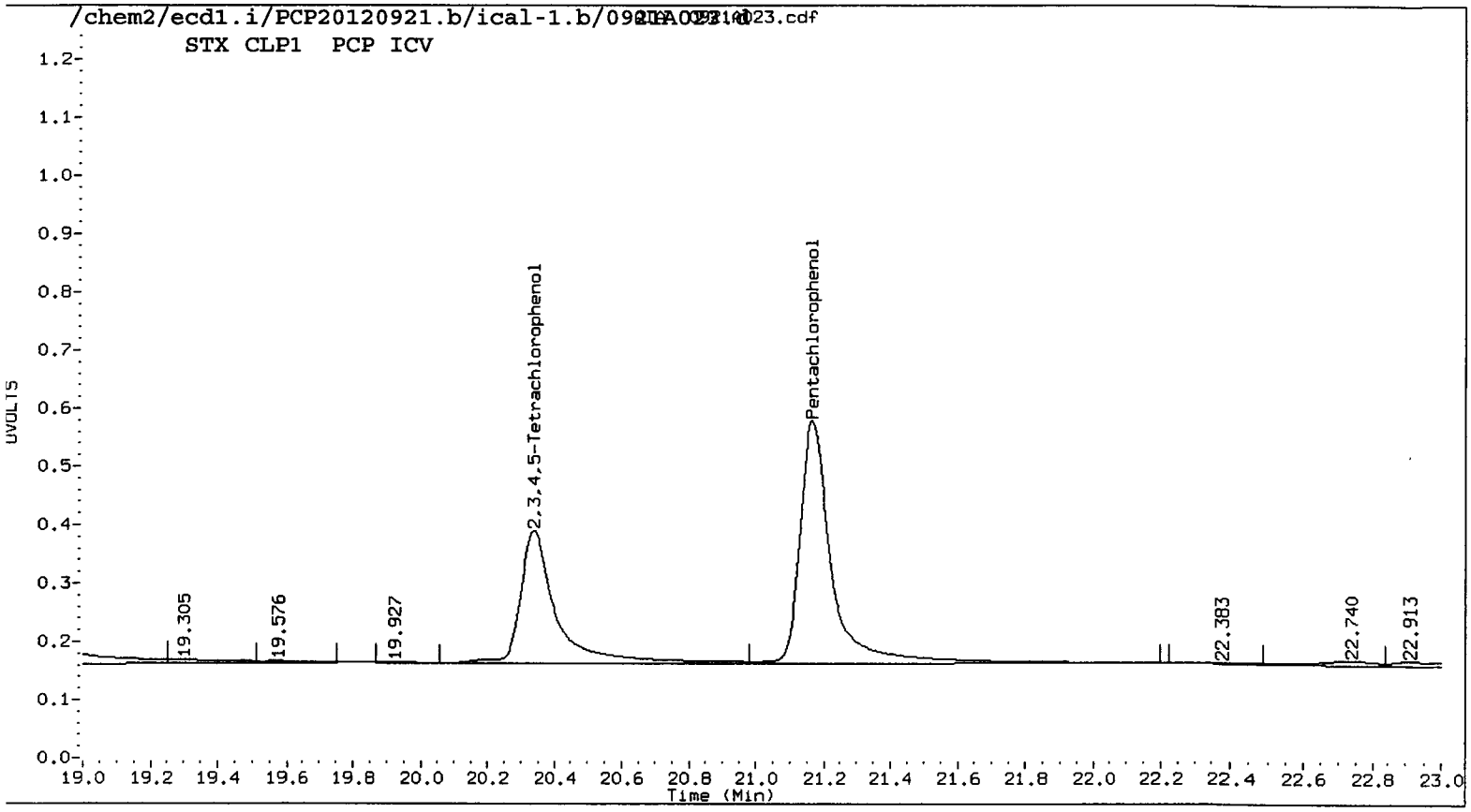
12.298
12.429
12.725
13.027
13.301
2,4-Dichlorophenol
2,4,6-Trichlorophenol
15.060
2,3,6-Trichlorophenol
16.330
16.596
17.047
2,4,5-Trichlorophenol
18.401
18.596
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
19.620
20.098
20.688
2,4,6-Tribromophenol (surr)
21.717
2,3,4,5-Tetrachlorophenol
22.512
Pentachlorophenol
UVOLTS
Time (Min)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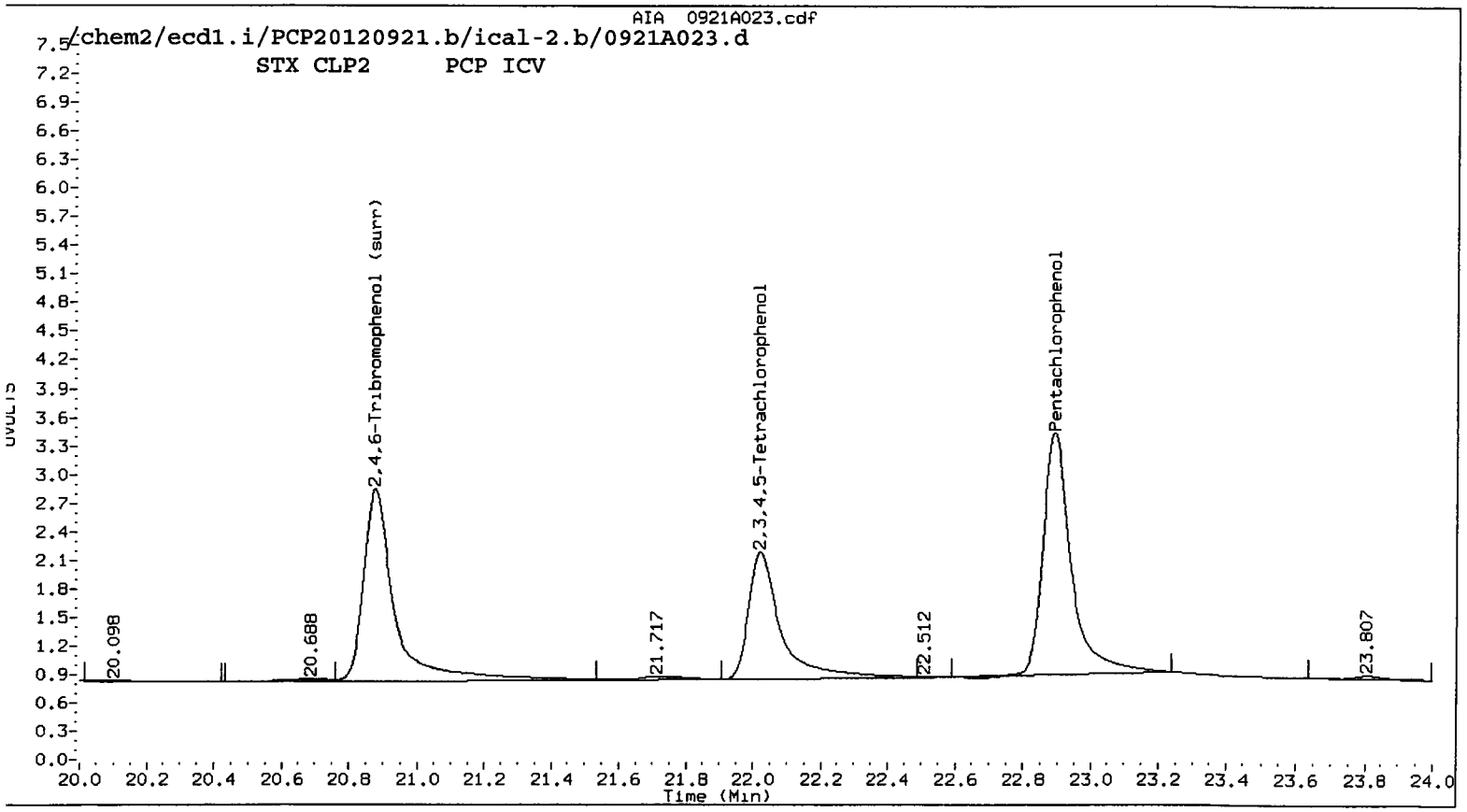
STX CLP1 PCP ICV
UV01 15
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.305
19.576
19.927
22.383
22.740
22.913
Time (Min)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STX CLP2 PCP ICV
UV01 15
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.098
20.688
21.717
22.512
23.807
Time (Min)

Data File: /chem2/ecd1.i/PCP20120921.b/ical-2.b/0921A023.d

Date : 21-SEP-2012 23:06

Client ID:

Instrument: ecd1.i

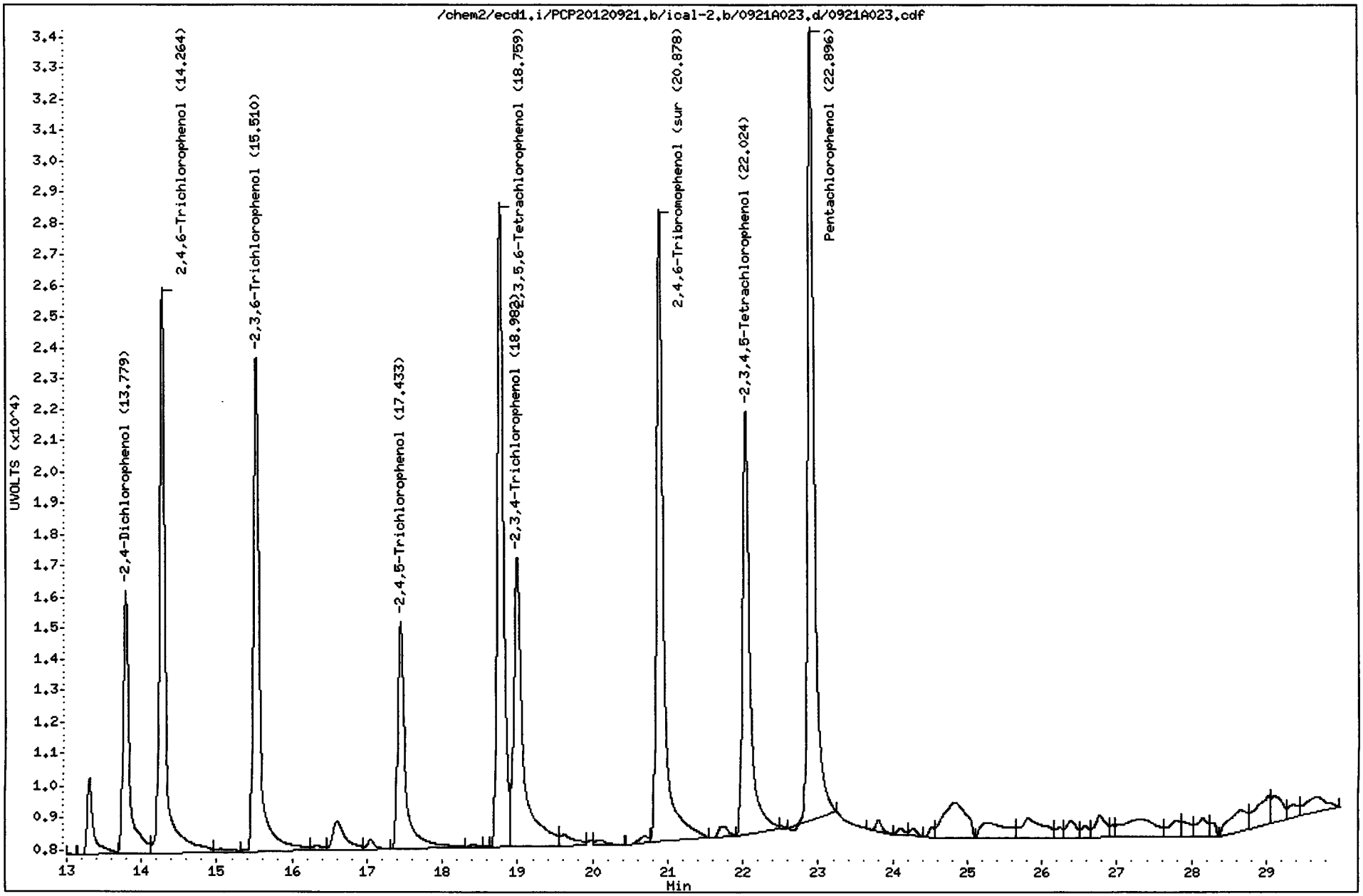
Sample Info: PCP ICV

Purge Volume: 500.0

Operator: ar

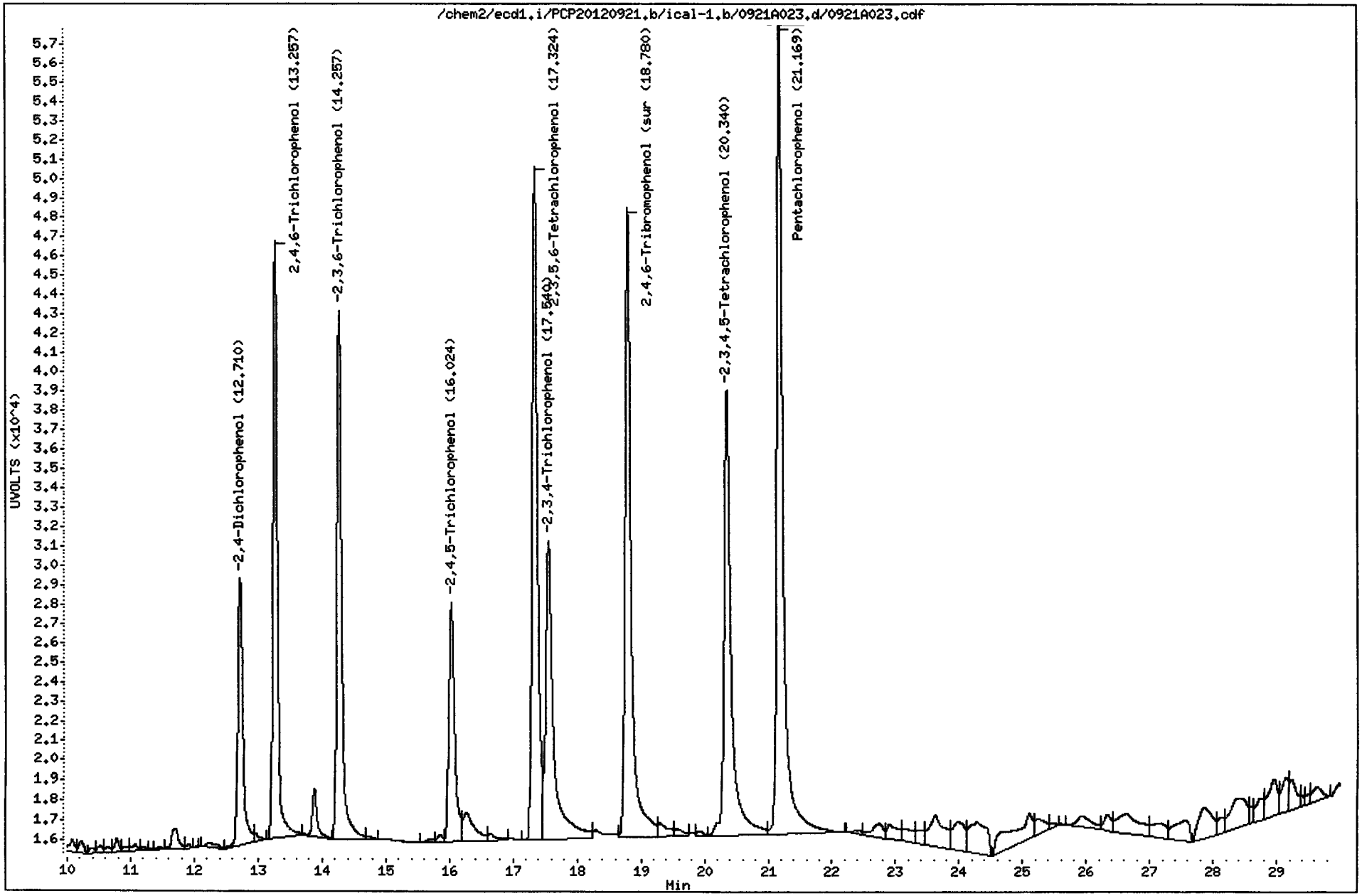
Column phase: STX CLP2

Column diameter: 0.53



Data File: /chem2/ecd1.i/PCP20120921.b/ical-1.b/0921A023.d
Date : 21-SEP-2012 23:06
Client ID:
Sample Info: PCP ICV
Purge Volume: 500.0
Column phase: STX CLP1

Instrument: ecd1.i
Operator: ar
Column diameter: 0.53



PCP/Chlorophenols Raw Data
Run Logs, Continuing Calibrations, and Raw Data

ARI Job ID: VR80

Analytical Resources, Incorporated
Analytical Chemists and Consultants

GC Analyst Notes / Corrective Action Log

ARI Project ID: VR80 Client ID: Another QEA

ARI SOP: **403S**(PCB) **405S**(Herb) **407S**(TPH-D) **409S**(HCID) **412S**(PCP) **423S**(Pest)
427S(Dir Inj) **428S**(EPH) **432S**(EDB) **Other**

Parameter(s): L.L PCP

Instrument: FID-3A FID-3B FID-4A FID-4B FID-5 FID-7 FID-8
FID-9 ECD-1 ECD-5 ECD-6 ECD-7

Dates: Curve: 09/24/12 Analysis Start: 11/22/12

Endrin/DDT Breakdown <15%? YES / NO / NA
Method Blank In Control? YES / NO
ICal Meets RF & %RSD Criteria? YES / NO
LCS/LCSD Recovery In Control? YES / NO
CCal Meets RF & %RSD Criteria? YES / NO
Surrogate Recovery In Control? YES / NO
Manual Integrations for ICal? YES / NO
Manual Integrations for Samples? YES / NO
Internal Standard Meets Criteria? YES / NO / NA
Special Analysis Criteria Met? YES / NO / NA

Detail problems, corrective actions and/or other pertinent information below (use reverse side when necessary):

- LCS/LCSD. surr recovery high on col, acceptable on col2.

Additional Details on Reverse: Yes / ~~No~~

Analyst: YZ **Date:** 11/23/12

Reviewer: MW **Date:** 11/23

Analytical Resources Inc.: Organics Instrument Log

ECD1 Serial No.: 3410A39690

Date: 11/20/12 Analysis: PCP Analyst: YZ

GC Program: Herbm Column No: 922995 / 801692 Column Type: STX-CLP / CLP

Calibration File: PCP20120921 Curve Date: 09/21/12 Injection Vol.: 2 uL

IS/SS	Ical/Ccal	LCS/ICV
	2034-3	

Document All Maintenance Tasks In StarLIMS

GC LOG SUMMARY FOR DATABATCH - /chem2/ecd1.i/PCP20120921.b/1120-1.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	20-NOV-2012 11:28	1120A003.d	1	PCPCCAL	
2	20-NOV-2012 12:05	1120A004.d	1	VR88MBW1	
3	20-NOV-2012 12:41	1120A005.d	1	VR88LCSW1	
4	20-NOV-2012 13:18	1120A006.d	1	VR88LCSDW1	
5	20-NOV-2012 13:54	1120A007.d	1	VR88A	
6	20-NOV-2012 14:31	1120A008.d	1	VR88B	
7	20-NOV-2012 15:07	1120A009.d	1	VR88C	
8	20-NOV-2012 15:43	1120A010.d	1	VR88D	
9	20-NOV-2012 16:20	1120A011.d	1	VR88E	
10	20-NOV-2012 16:56	1120A012.d	1	VS14A	
11	20-NOV-2012 17:32	1120A013.d	1	VS14B	
12	20-NOV-2012 18:09	1120A014.d	1	VS14C	
13	20-NOV-2012 18:45	1120A015.d	1	VS14D	
14	20-NOV-2012 19:21	1120A016.d	1	VS14E	
15	20-NOV-2012 19:58	1120A017.d	1	PCP	
16	20-NOV-2012 20:34	1120A018.d	1	PCPCCAL	
17	20-NOV-2012 21:10	1120A019.d	1	VR80MBW1	
18	20-NOV-2012 21:47	1120A020.d	1	VR80LCSW1	
19	20-NOV-2012 22:23	1120A021.d	1	VR80LCSDW1	
20	20-NOV-2012 22:59	1120A022.d	1	VR80A	
21	20-NOV-2012 23:36	1120A023.d	1	VR80B	
22	21-NOV-2012 00:12	1120A024.d	1	VR80C	
23	21-NOV-2012 00:48	1120A025.d	1	VR80D	
24	21-NOV-2012 01:25	1120A026.d	1	PCP	
25	21-NOV-2012 02:01	1120A027.d	1	PCPCCAL	

Every line must contain information or be lined out. Make all entries legible.
Start a new page for each QC period. Document All Maintenance Tasks In StarLIMS

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

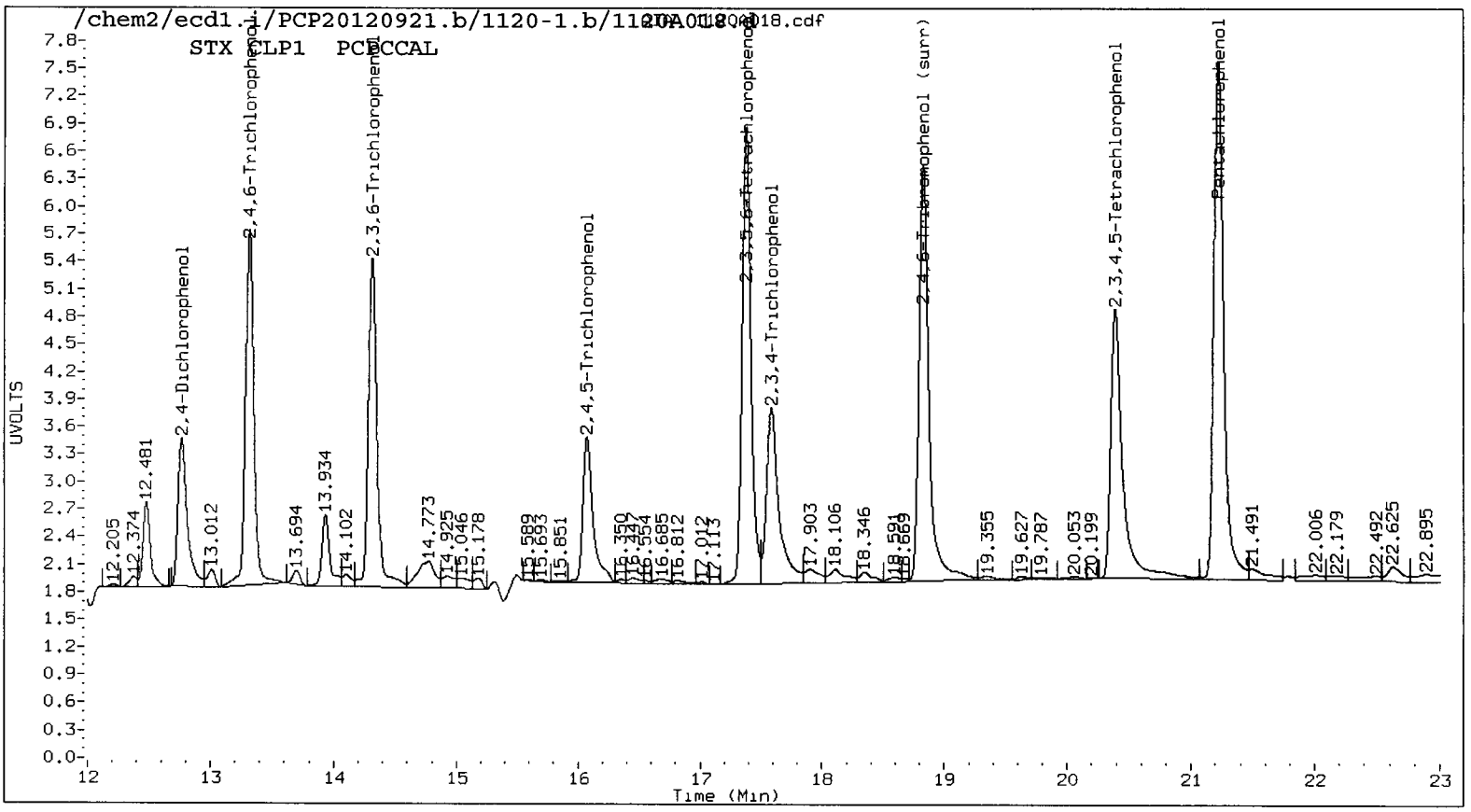
YZ 11/23/12

Data file 1: /chem2/ecd1.i/PCP20120921.b/1120-1.b/1120A018.d ARI ID: PCPCCAL
Data file 2: /chem2/ecd1.i/PCP20120921.b/1120-2.b/1120A018.d Client ID:
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 20-NOV-2012 20:34
Compound Sublist: all Report Date: 11/23/2012 10:44
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.222	0.020	1560699	22.948	0.018	956199	27.4429	26.7927	2.4	Pentachlorophenol
13.316	0.020	895610	14.323	0.019	607969	28.1175	26.2600	6.8	2,4,6-Trichlorophenol
14.315	0.020	876965	15.568	0.020	517924	27.2557	25.0022	8.6	2,3,6-Trichlorophenol
16.073	0.020	466559	17.483	0.020	276524	23.1924	20.8568	10.6	2,4,5-Trichlorophenol
17.585	0.021	665788	19.030	0.019	362692	27.5064	21.5774	24.2	2,3,4-Trichlorophenol
17.377	0.020	1273816	18.812	0.019	746009	27.1066	25.8264	4.8	2,3,5,6-Tetrachloroph
20.390	0.020	1007543	22.075	0.019	551995	28.2762	26.6374	6.0	2,3,4,5-Tetrachloroph
12.770	0.018	426662	13.836	0.019	236520	275.4167	228.7266	18.5	2,4-Dichlorophenol
18.827	0.020	1296258	20.929	0.019	796914	28.0	26.4	5.8	2,4,6-Tribromophenol (

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	109.8	107.2
2,4,6-Trichlorophenol	112.5	105.0
2,3,6-Trichlorophenol	109.0	100.0
2,4,5-Trichlorophenol	92.8	83.4
2,3,4-Trichlorophenol	110.0	86.3
2,3,5,6-Tetrachlorophenol	108.4	103.3
2,3,4,5-Tetrachlorophenol	113.1	106.5
2,4-Dichlorophenol	110.2	91.5
2,4,6-TBP (surr)	112.1	105.7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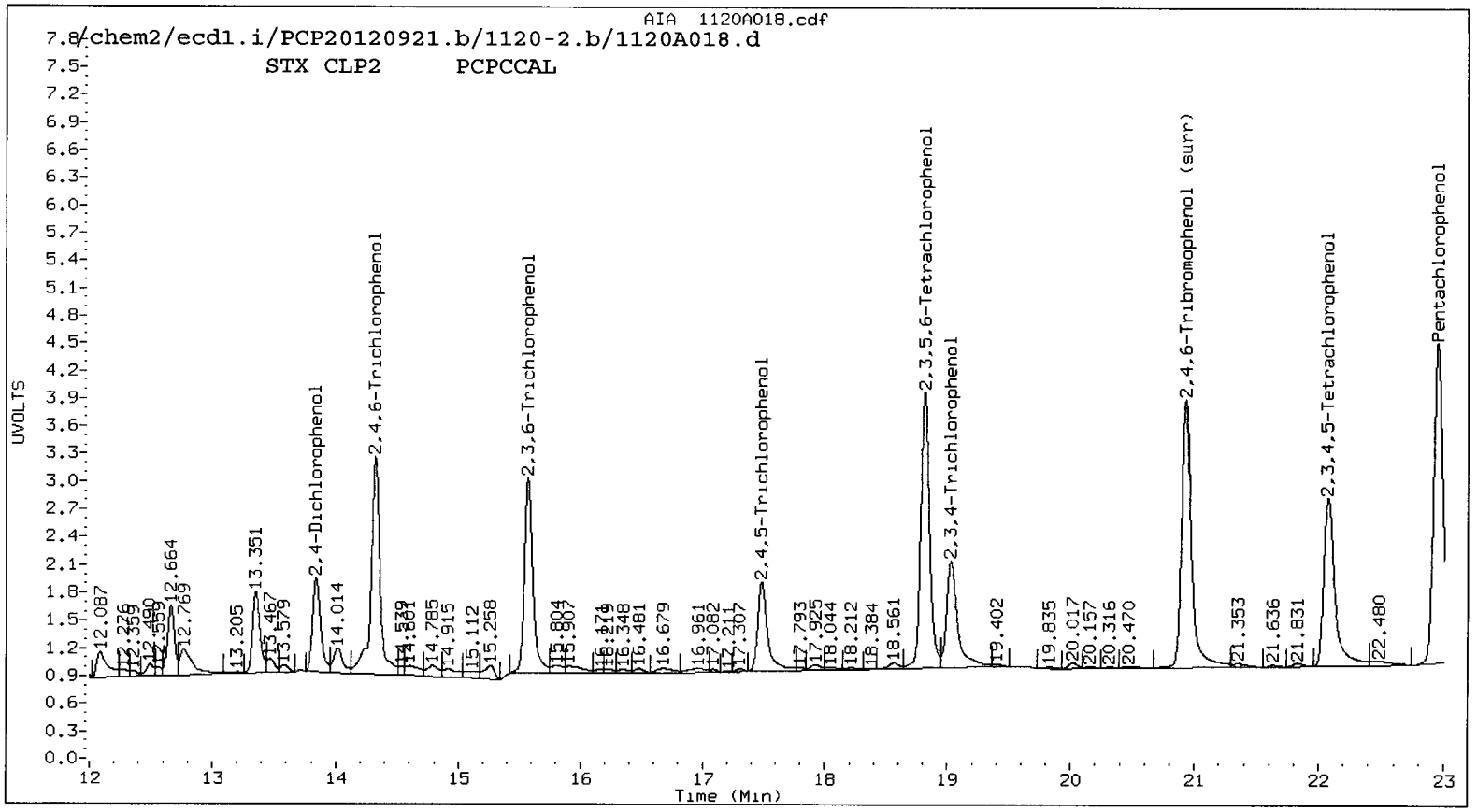
AIA 1120A018.cdf
STX CLP1 PCPCCAL
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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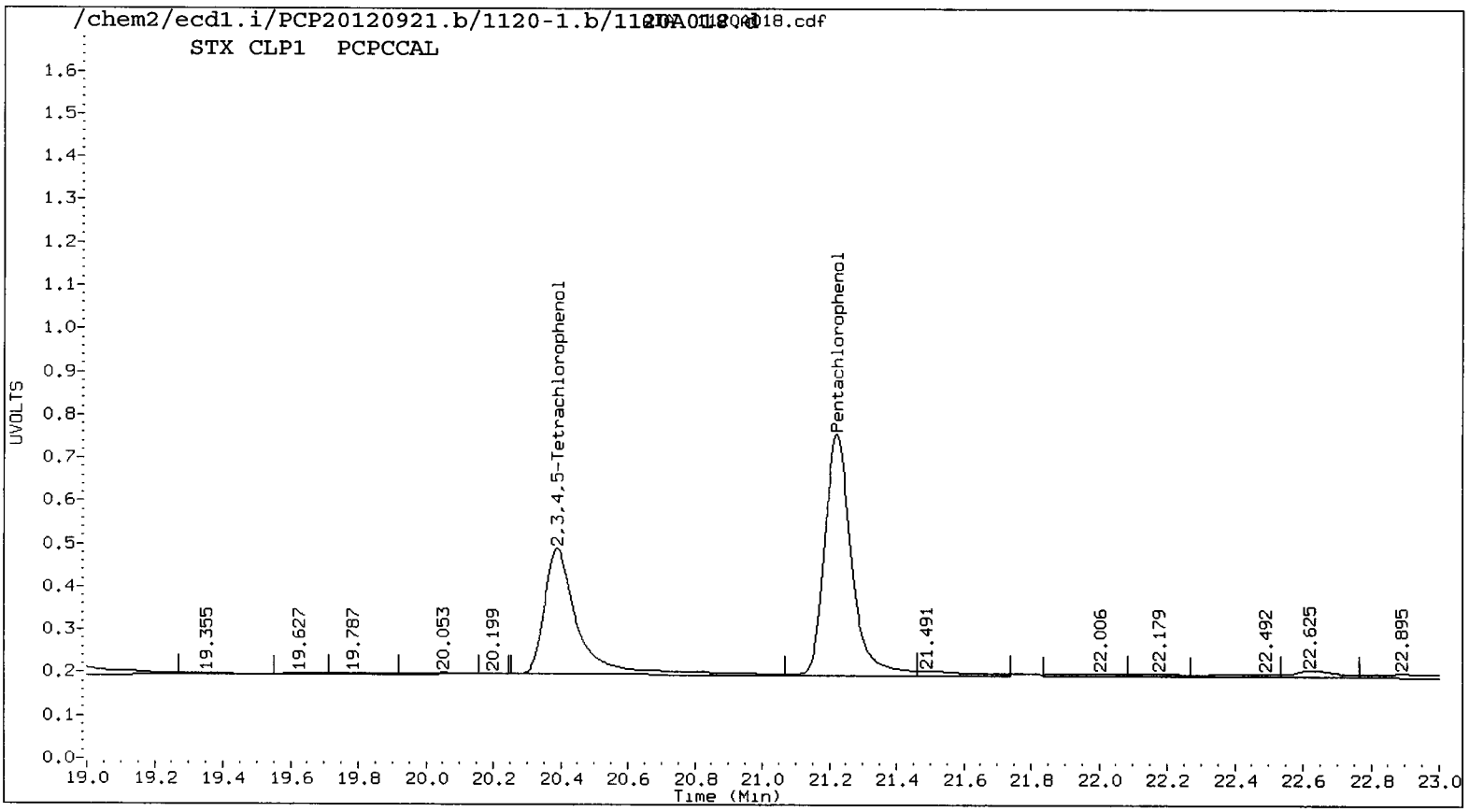
AIA 1120A018.cdf
STX CLP2 PCPCCAL
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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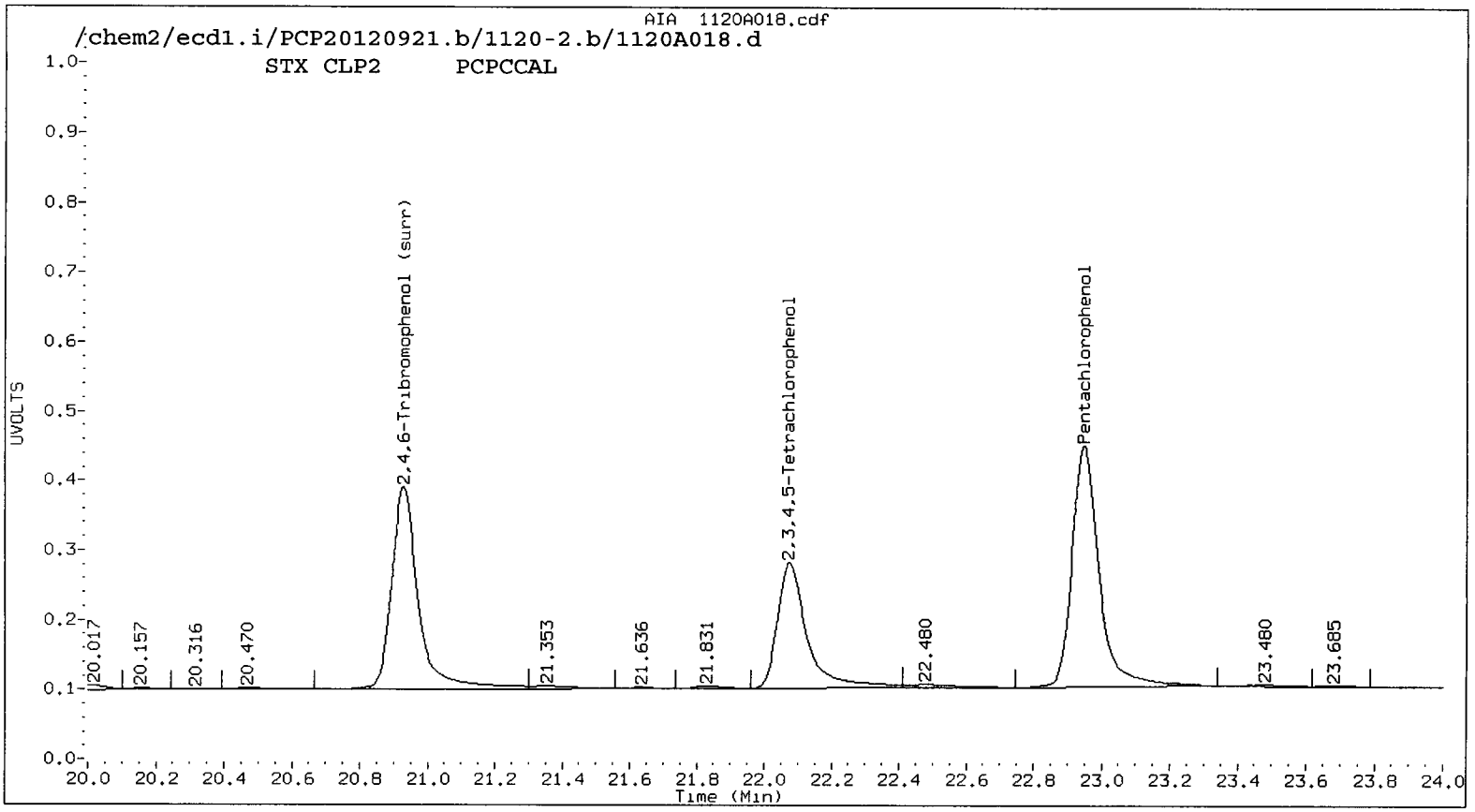
STX CLP1 PCPCCAL
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.355
19.627
19.787
20.053
20.199
21.491
22.006
22.179
22.492
22.625
22.895
Time (Min)


AIA 1120A018.cdf
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STX CLP2 PCPCCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.017
20.157
20.316
20.470
21.353
21.636
21.831
22.480
23.480
23.685
Time (Min)

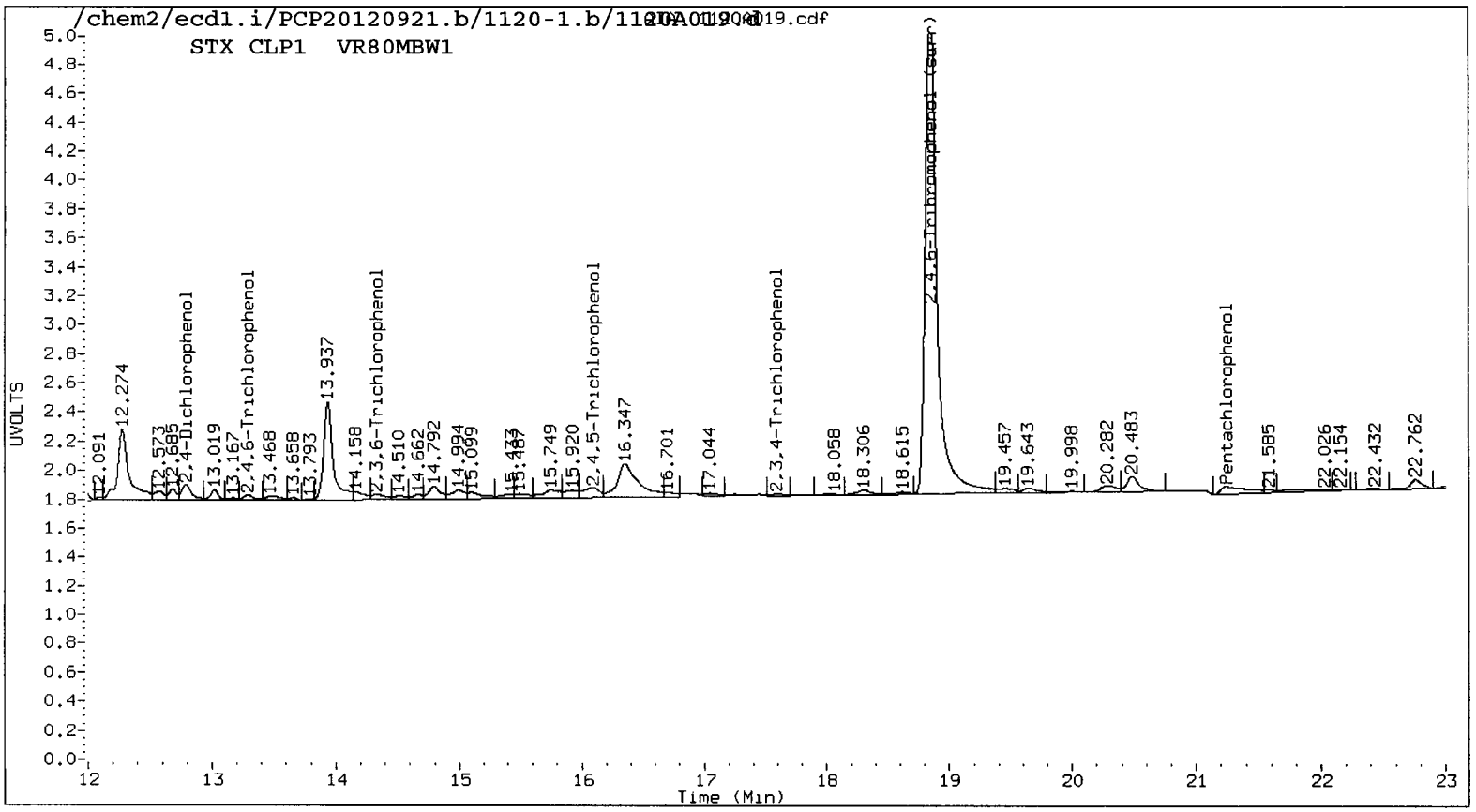
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

Data file 1: /chem2/ecd1.i/PCP20120921.b/1120-1.b/1120A019.d ARI ID: VR80MBW1
Data file 2: /chem2/ecd1.i/PCP20120921.b/1120-2.b/1120A019.d Client ID: VR80MBW1
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 20-NOV-2012 21:10
Compound Sublist: all Report Date: 11/23/2012 10:44
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.243	0.041	37337	22.962	0.032	6887	0.5606	0.1930	97.6*	Pentachlorophenol
13.287	-0.009	9063	14.239	-0.065	42379	0.2845	1.5552	138.1*	2,4,6-Trichlorophenol
14.332	0.037	13250	----			0.3083	0.0000	---	2,3,6-Trichlorophenol
16.088	0.035	31809	17.503	0.039	5161	1.1699	0.2477	130.1*	2,4,5-Trichlorophenol
17.591	0.026	4774	19.064	0.053	685	0.1476	0.0235	145.0*	2,3,4-Trichlorophenol
----			18.839	0.046	8873	0.0000	0.3072	---	2,3,5,6-Tetrachlorophe
----			22.071	0.015	612	0.0000	0.0296	---	2,3,4,5-Tetrachlorophe
12.790	0.038	29501	----			16.2546	0.0000	---	2,4-Dichlorophenol
18.842	0.035	1143971	20.938	0.029	683612	24.3	22.7	6.8	2,4,6-Tribromophenol (

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	97.0	90.7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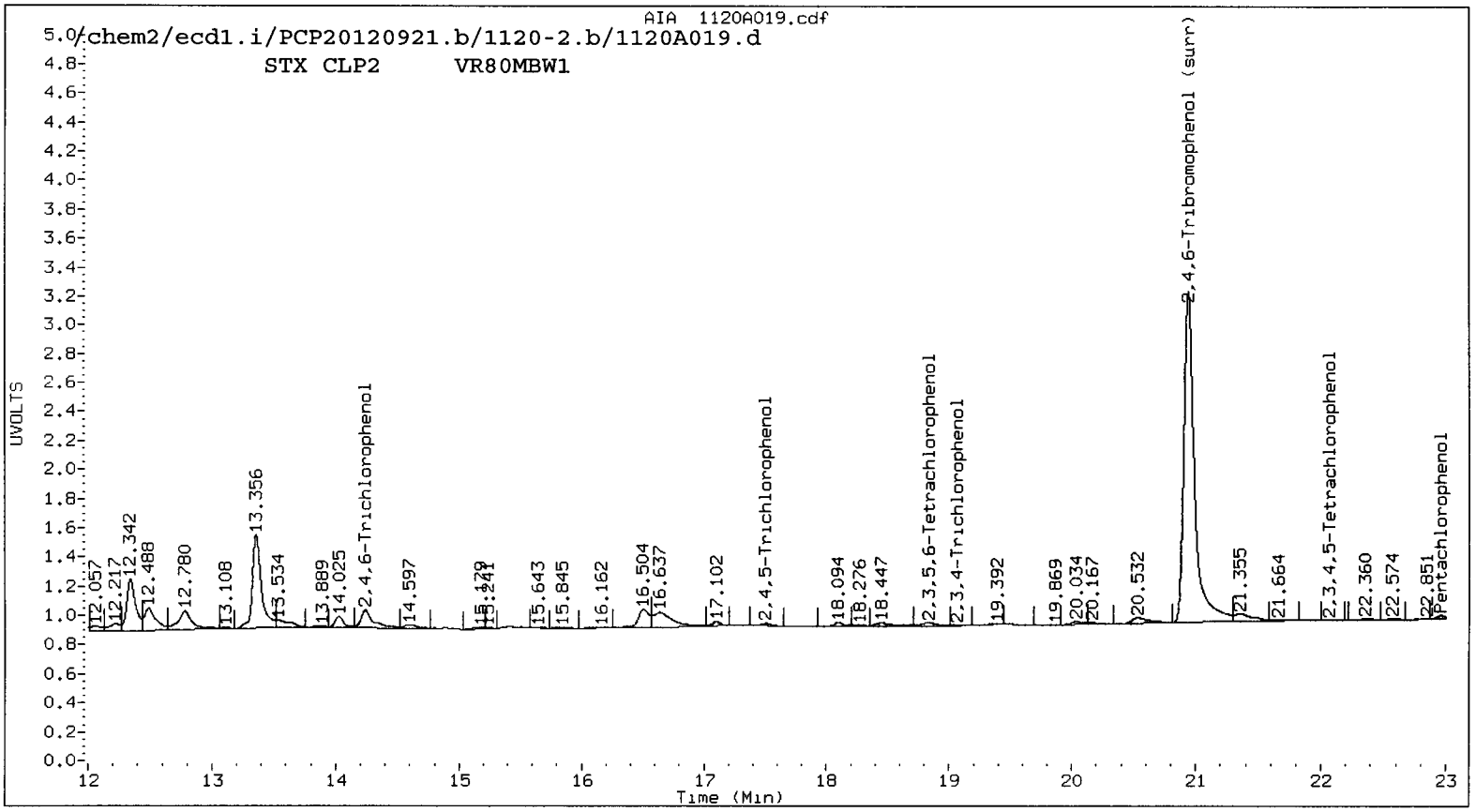
STX CLP1 VR80MBW1
UVOLTS
Time (Min)
12.091
12.274
12.573
12.685
2,4-Dichlorophenol
13.019
13.167
2,4,6-Trichlorophenol
13.468
13.658
13.793
13.937
2,3,6-Trichlorophenol
14.158
14.510
14.662
14.792
14.994
15.099
15.433
15.487
15.749
15.920
2,4,5-Trichlorophenol
16.347
16.701
17.044
2,3,4-Trichlorophenol
18.058
18.306
18.615
2,4,6-Tribromophenol (surr)
19.457
19.643
19.998
20.282
20.483
Pentachlorophenol
21.585
22.026
22.154
22.432
22.762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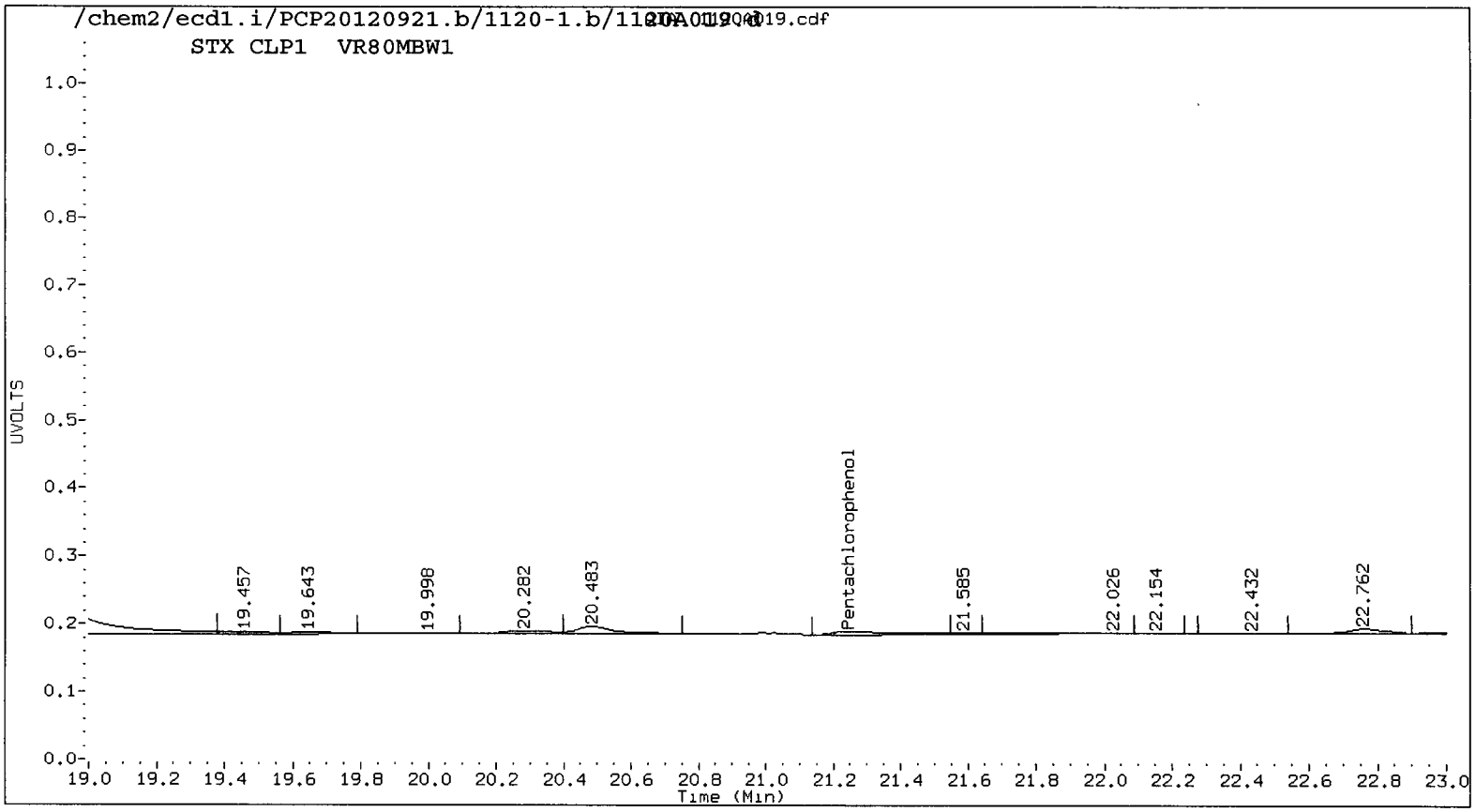
AIA 1120A019.cdf
STX CLP2 VR80MBW1
UVOLTS
Time (Min)
12.057
12.217
12.342
12.488
12.780
13.108
13.356
13.534
13.889
14.025
2,4,6-Trichlorophenol
14.597
15.643
15.845
16.162
16.504
16.637
17.102
2,4,5-Trichlorophenol
18.094
18.276
18.447
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
19.392
19.869
20.034
20.167
20.532
2,4,6-Tribromophenol (surr)
21.355
21.664
2,3,4,5-Tetrachlorophenol
22.360
22.574
22.851
Pentachlorophenol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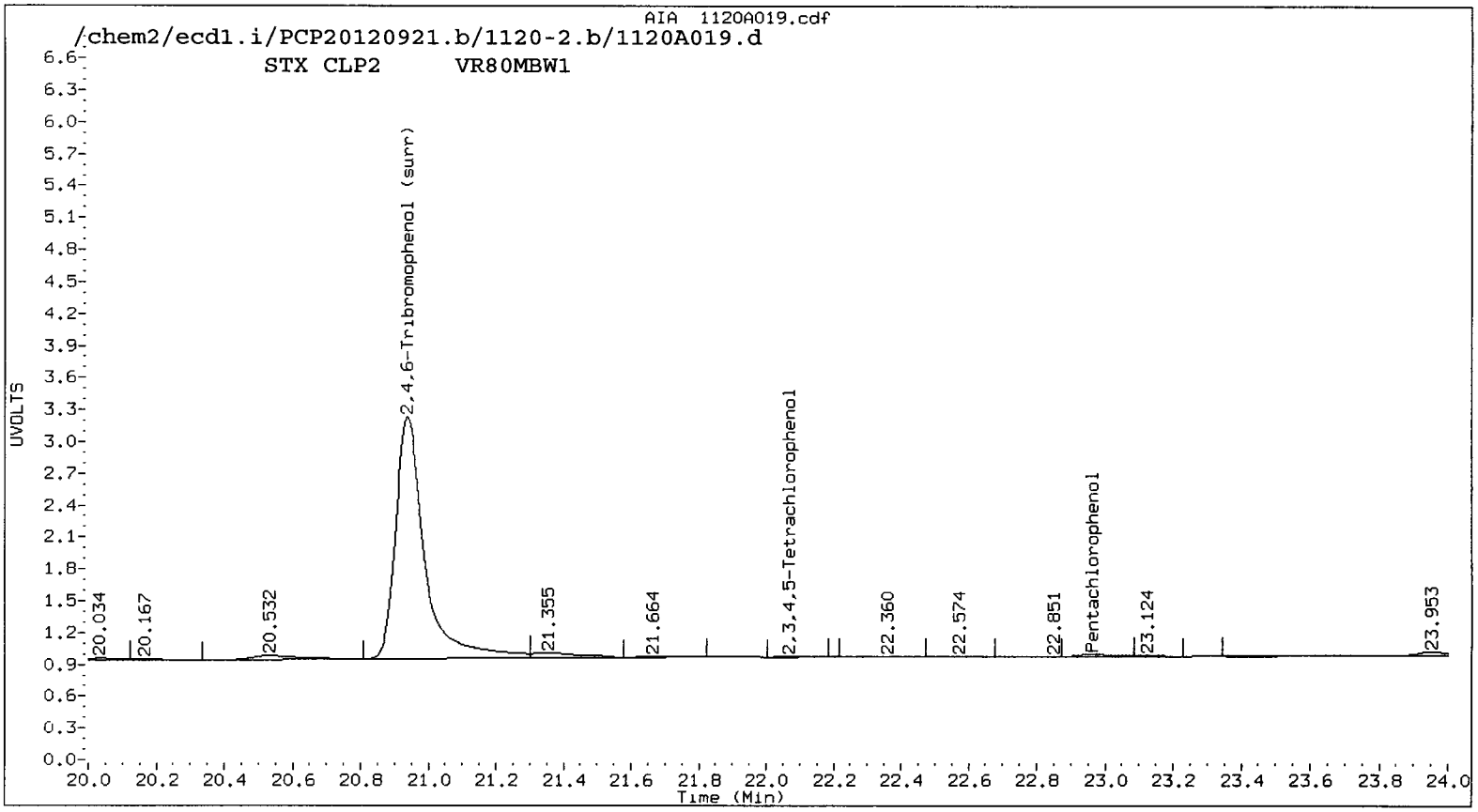
AIA 1120A019.cdf
STX CLP1 VR80MBW1
UVOLTS
Time (Min)
19.457
19.643
19.998
20.282
20.483
Pentachlorophenol
21.585
22.026
22.154
22.432
22.762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STX CLP2 VR80MBW1
UVOLTS
Time (Min)
20.034
20.167
20.532
2,4,6-Tribromophenol (surr)
21.355
21.664
2,3,4,5-Tetrachlorophenol
22.360
22.574
22.851
Pentachlorophenol
23.124
23.953

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

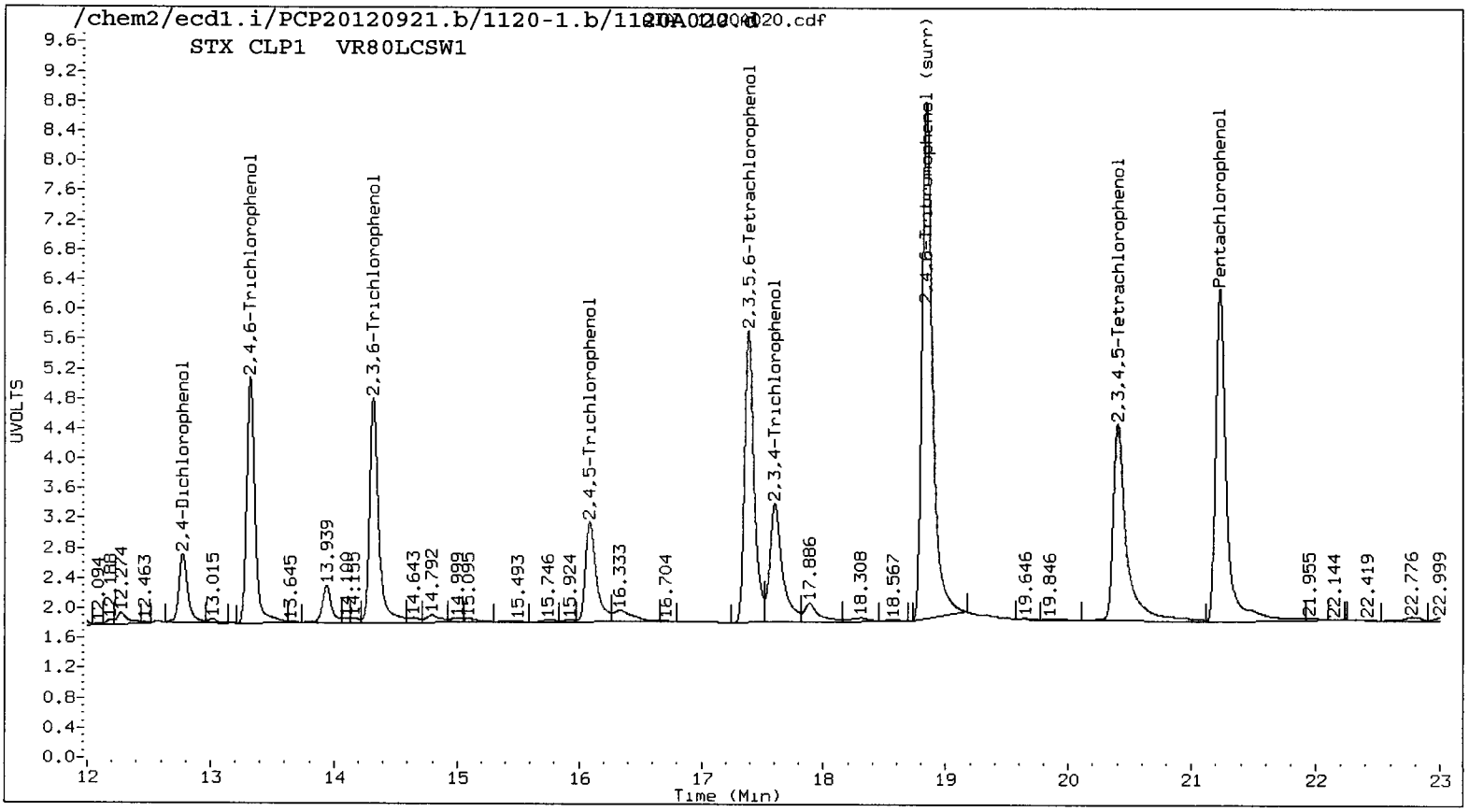
YZ 11/23/12

Data file 1: /chem2/ecd1.i/PCP20120921.b/1120-1.b/1120A020.d ARI ID: VR80LCSW1
Data file 2: /chem2/ecd1.i/PCP20120921.b/1120-2.b/1120A020.d Client ID: VR80LCSW1
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 20-NOV-2012 21:47
Compound Sublist: all Report Date: 11/23/2012 10:44
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.231	0.029	1374070	22.956	0.025	793657	23.7288	22.2383	6.5	Pentachlorophenol
13.320	0.024	775084	14.327	0.023	476629	24.3336	19.8681	20.2	2,4,6-Trichlorophenol
14.321	0.026	773500	15.571	0.024	448791	23.3161	21.1144	9.9	2,3,6-Trichlorophenol
16.085	0.032	411087	17.493	0.029	258711	19.7568	19.0474	3.7	2,4,5-Trichlorophenol
17.602	0.037	561935	19.042	0.031	330528	22.2978	18.9241	16.4	2,3,4-Trichlorophenol
17.387	0.030	1068047	18.820	0.027	655262	22.7278	22.6848	0.2	2,3,5,6-Tetrachloroph
20.401	0.032	1002716	22.083	0.027	520239	28.1152	25.1049	11.3	2,3,4,5-Tetrachloroph
12.774	0.023	234833	13.841	0.024	133015	140.8662	115.9707	19.4	2,4-Dichlorophenol
18.840	0.032	2071384	20.937	0.028	1328209	49.1	44.0	10.9	2,4,6-Tribromophenol

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	94.9	89.0
2,4,6-Trichlorophenol	97.3	79.5
2,3,6-Trichlorophenol	93.3	84.5
2,4,5-Trichlorophenol	79.0	76.2
2,3,4-Trichlorophenol	89.2	75.7
2,3,5,6-Tetrachlorophenol	90.9	90.7
2,3,4,5-Tetrachlorophenol	112.5	100.4
2,4-Dichlorophenol	56.3	46.4
2,4,6-TBP (surr)	98.2	88.1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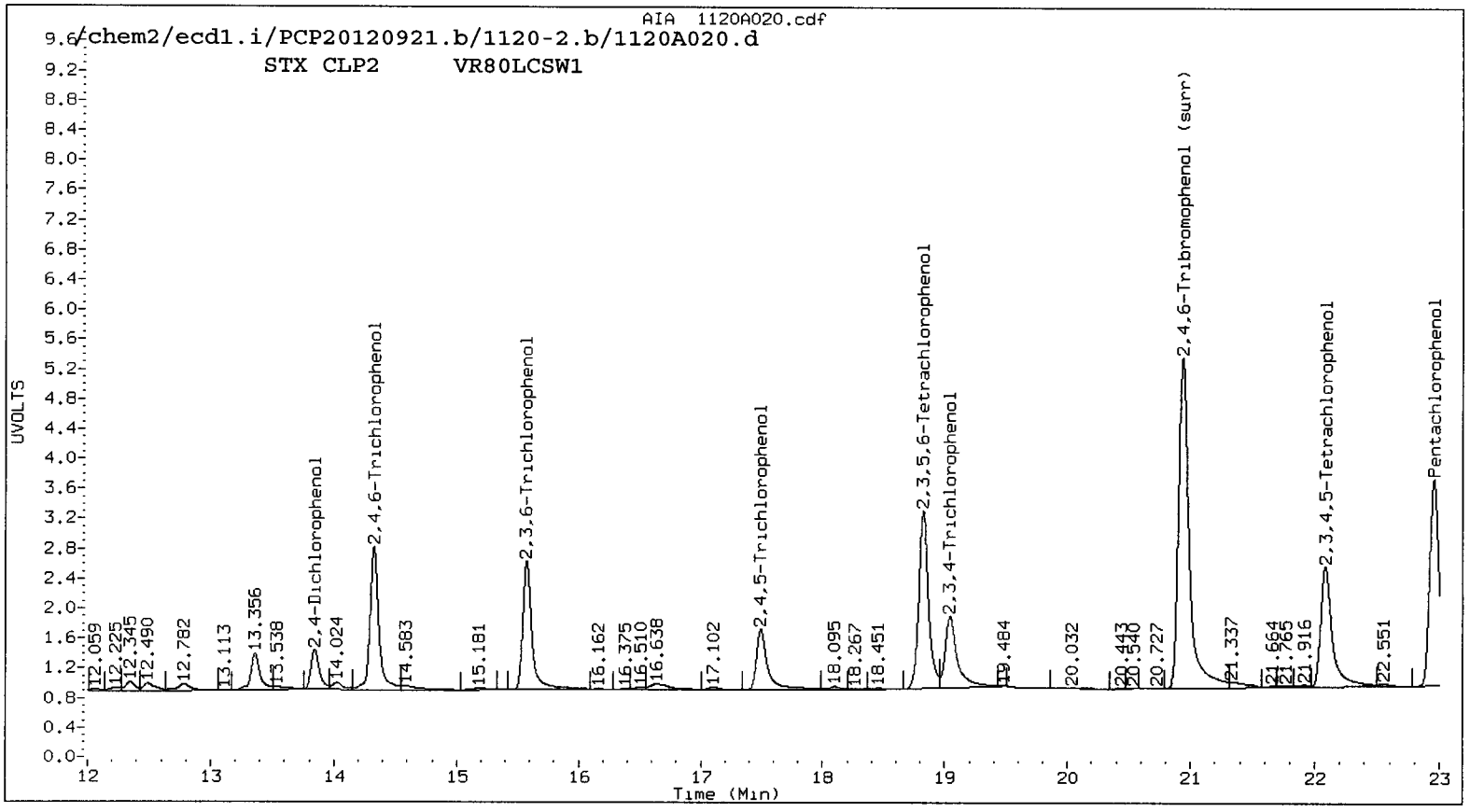
STX CLP1 VR80LCSW1
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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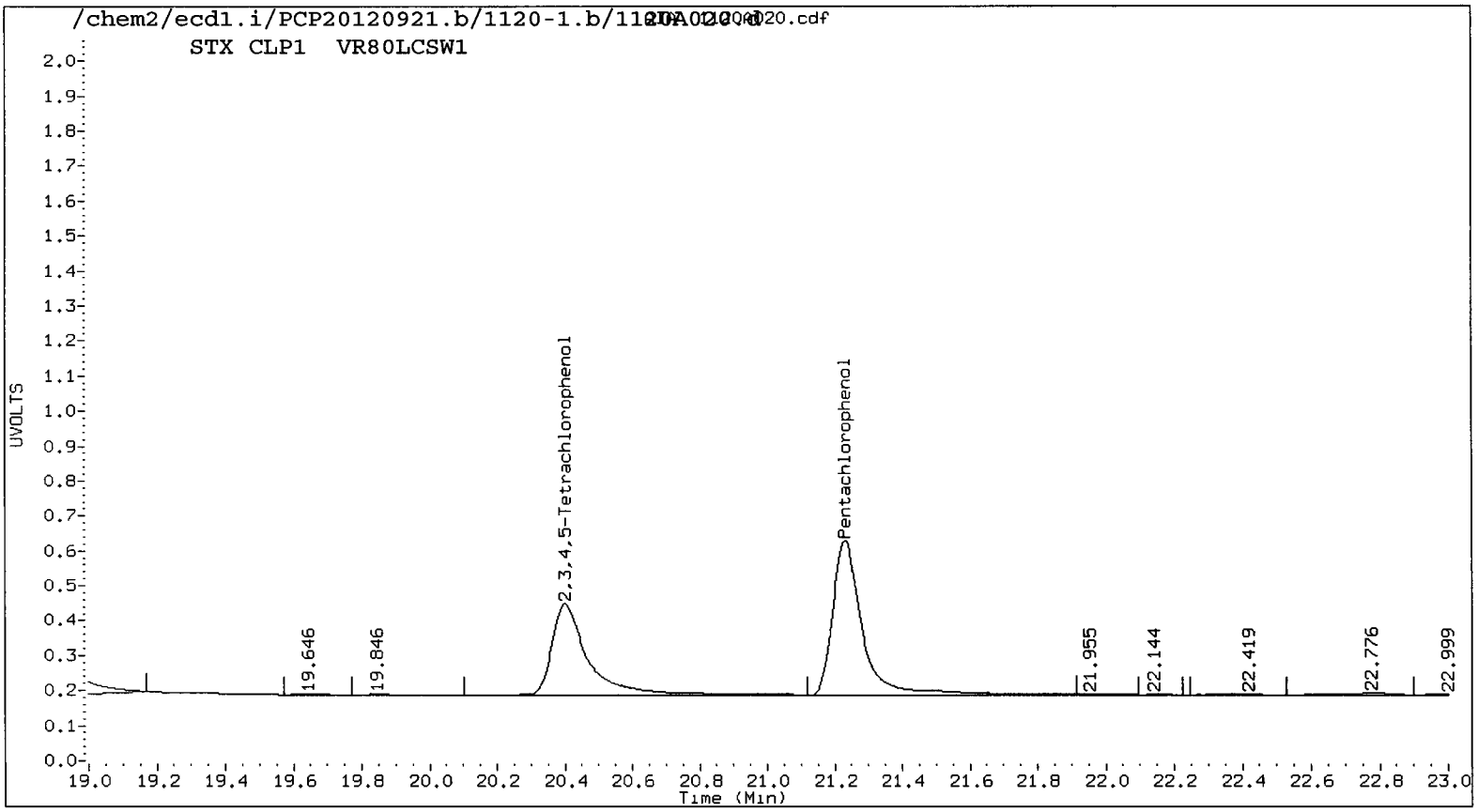
STX CLP2 VR80LCSW1
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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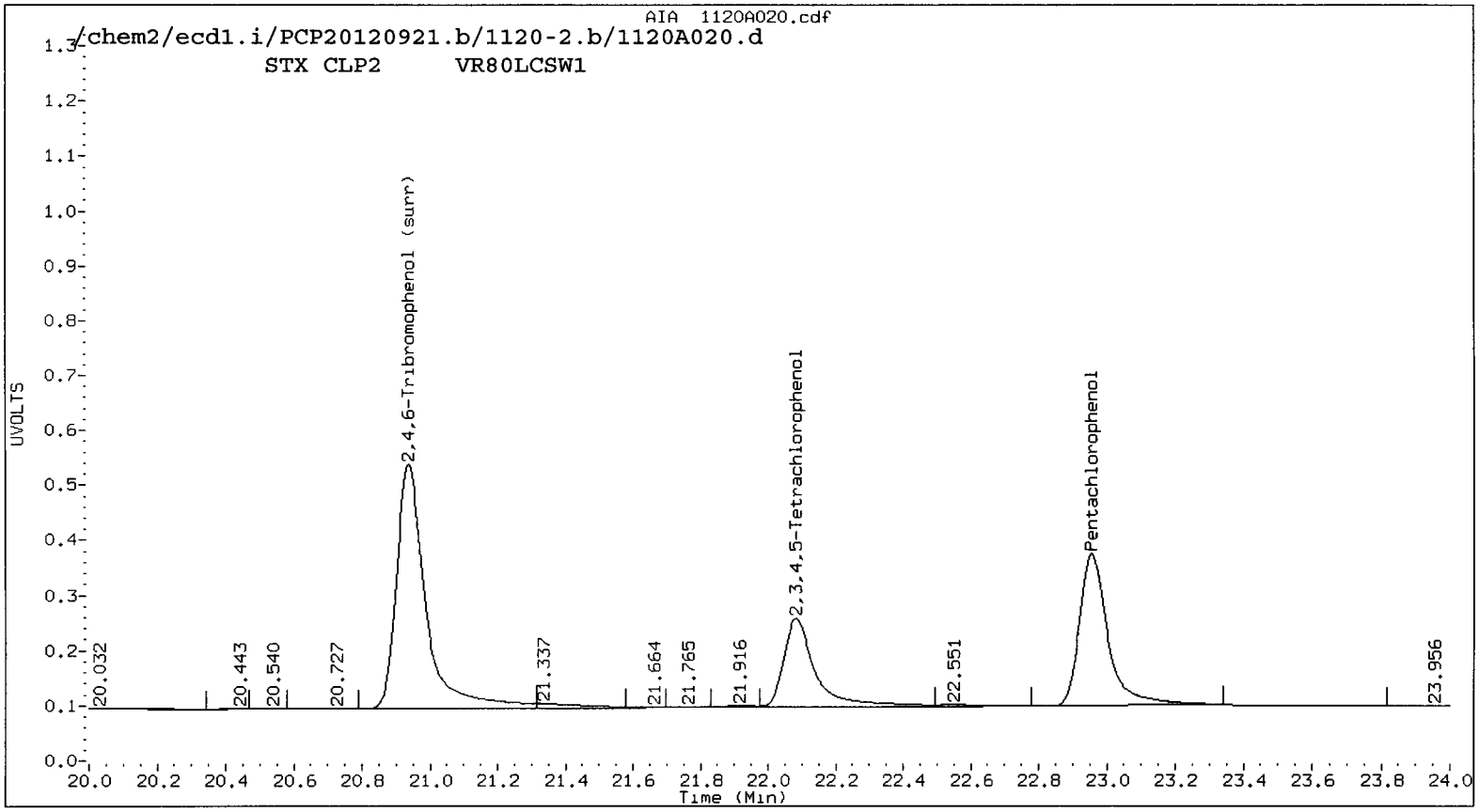
AIA 1120A020.cdf
STX CLP1 VR80LCSW1
UVOLTS
Time (Min)
19.646
19.846
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
21.955
22.144
22.419
22.776
22.999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AIA 1120A020.cdf
STX CLP2 VR80LCSW1
UVOLTS
Time (Min)
20.032
20.443
20.540
20.727
2,4,6-Tribromophenol (surr)
21.337
21.664
21.765
21.916
2,3,4,5-Tetrachlorophenol
22.551
Pentachlorophenol
23.956

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

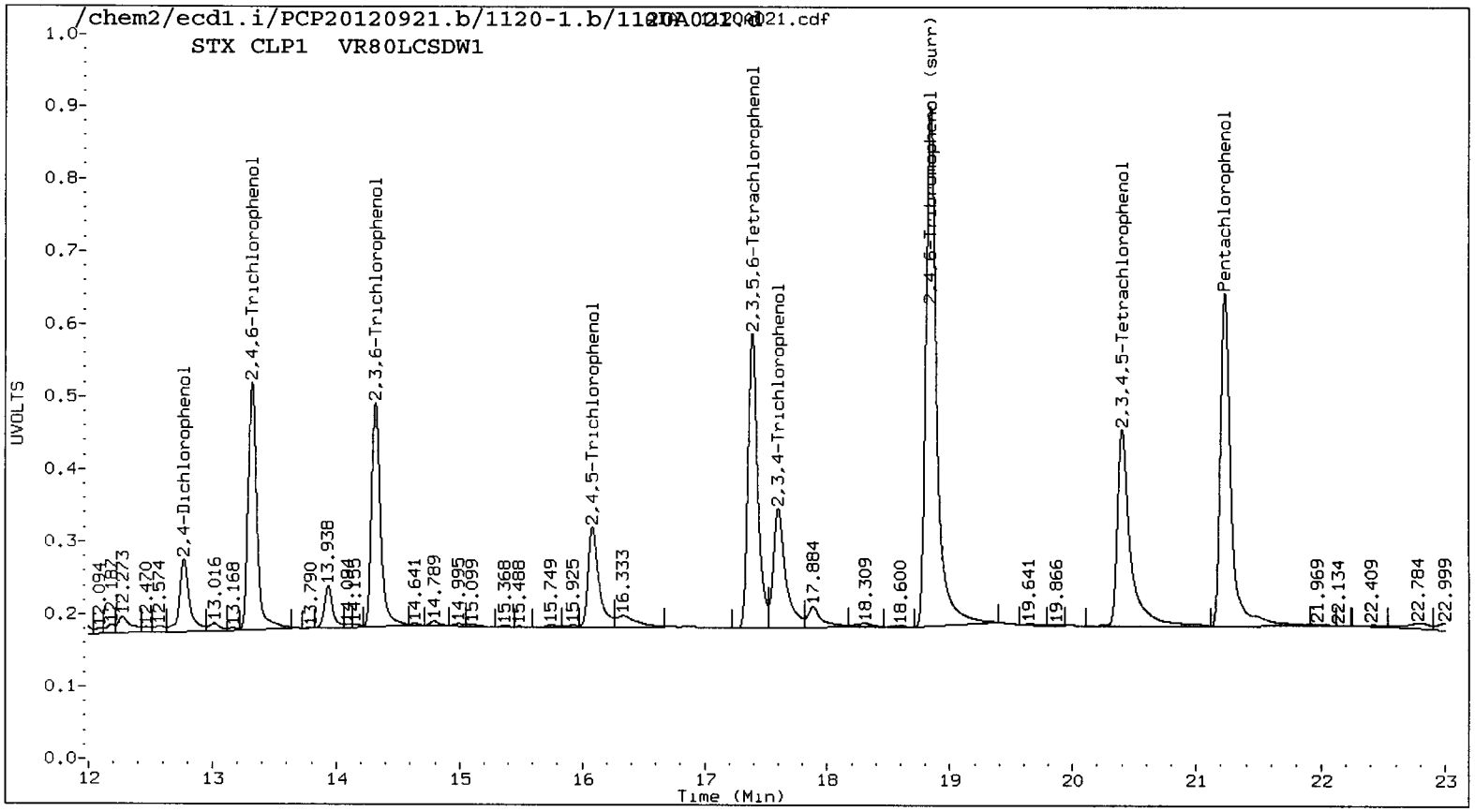
YZ 11/23/12

Data file 1: /chem2/ecd1.i/PCP20120921.b/1120-1.b/1120A021.d ARI ID: VR80LCSDW1
Data file 2: /chem2/ecd1.i/PCP20120921.b/1120-2.b/1120A021.d Client ID: VR80LCSDW1
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 20-NOV-2012 22:23
Compound Sublist: all Report Date: 11/23/2012 10:45
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.230	0.028	1412909	22.955	0.025	821575	24.4921	23.0205	6.2	Pentachlorophenol
13.319	0.023	812635	14.326	0.022	490375	25.5125	20.5185	21.7	2,4,6-Trichlorophenol
14.320	0.025	766008	15.571	0.023	466181	23.0383	22.0764	4.3	2,3,6-Trichlorophenol
16.084	0.031	433207	17.492	0.029	266716	21.1048	19.8525	6.1	2,4,5-Trichlorophenol
17.600	0.035	581199	19.041	0.030	346481	23.2384	20.2221	13.9	2,3,4-Trichlorophenol
17.386	0.028	1100444	18.819	0.026	680182	23.4172	23.5475	0.6	2,3,5,6-Tetrachloroph
20.400	0.031	1032671	22.082	0.027	542573	29.1181	26.1827	10.6	2,3,4,5-Tetrachloroph
12.773	0.022	285475	13.841	0.023	136486	174.6851	119.4328	37.6	2,4-Dichlorophenol
18.839	0.031	2211357	20.936	0.027	1363113	53.3	45.2	16.4	2,4,6-Tribromophenol

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	98.0	92.1
2,4,6-Trichlorophenol	102.1	82.1
2,3,6-Trichlorophenol	92.2	88.3
2,4,5-Trichlorophenol	84.4	79.4
2,3,4-Trichlorophenol	93.0	80.9
2,3,5,6-Tetrachlorophenol	93.7	94.2
2,3,4,5-Tetrachlorophenol	116.5	104.7
2,4-Dichlorophenol	69.9	47.8
2,4,6-TBP (surr)	106.5	90.4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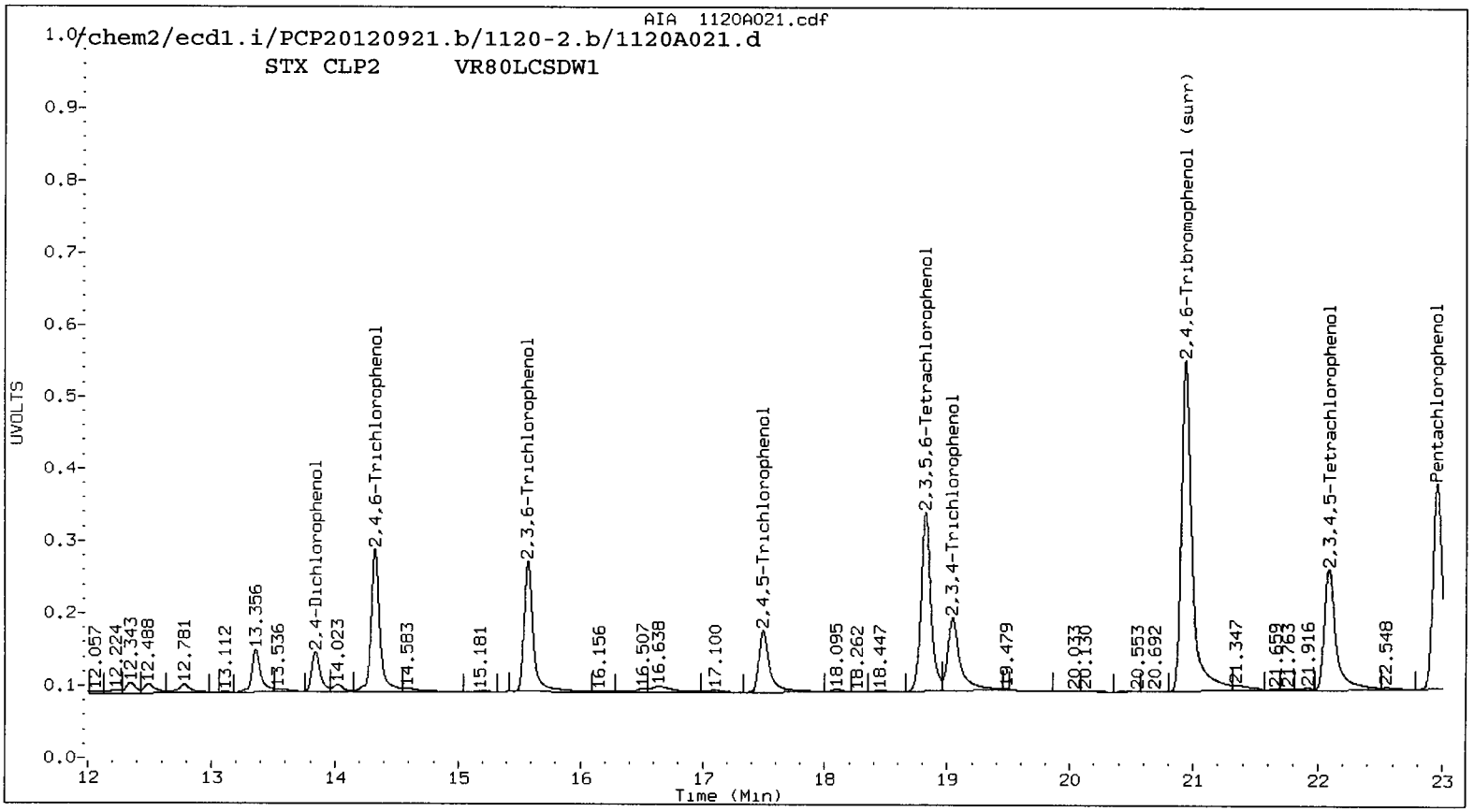
AIA 1120A021.cdf
STX CLP1 VR80LCSDW1
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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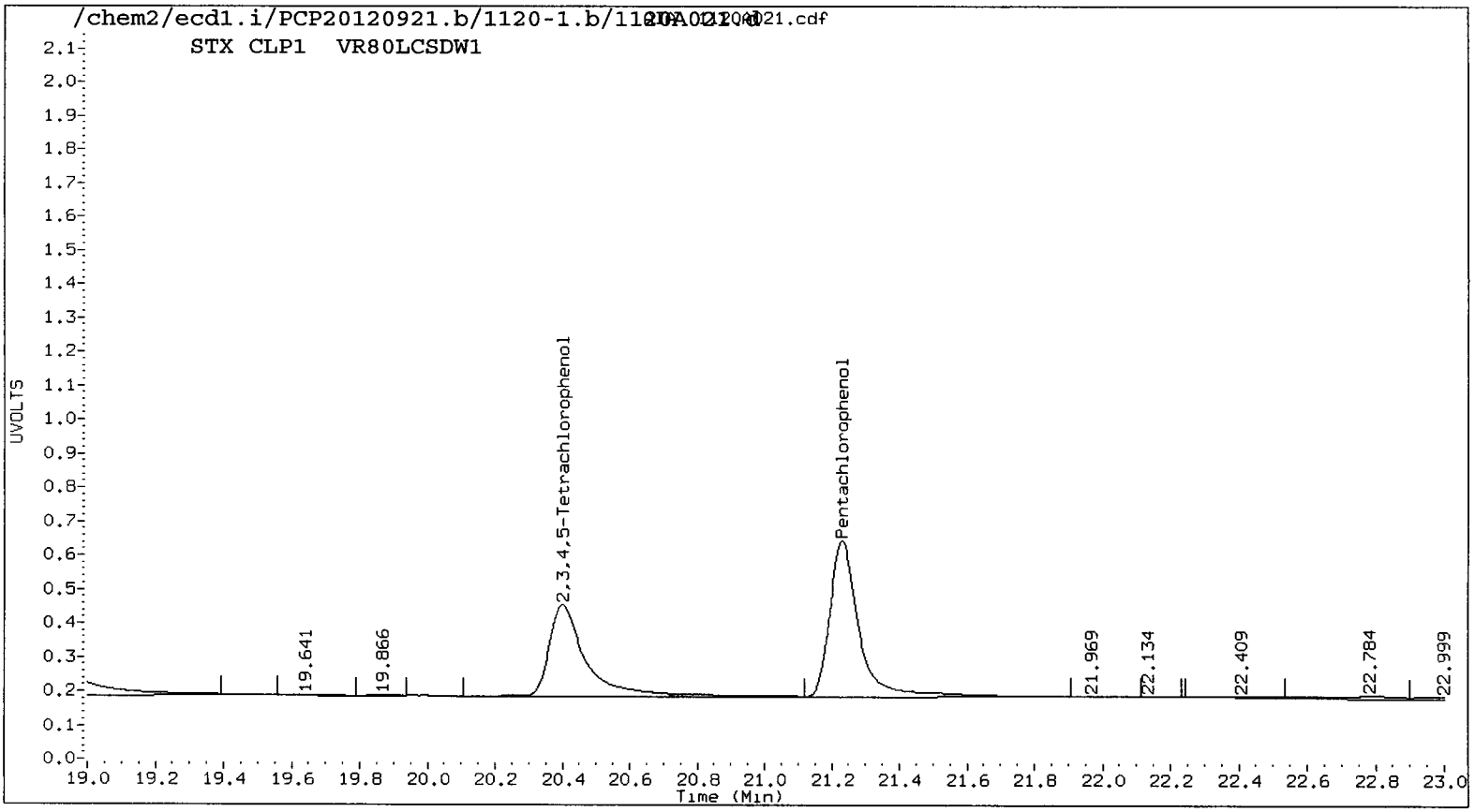
STX CLP2 VR80LCSDW1
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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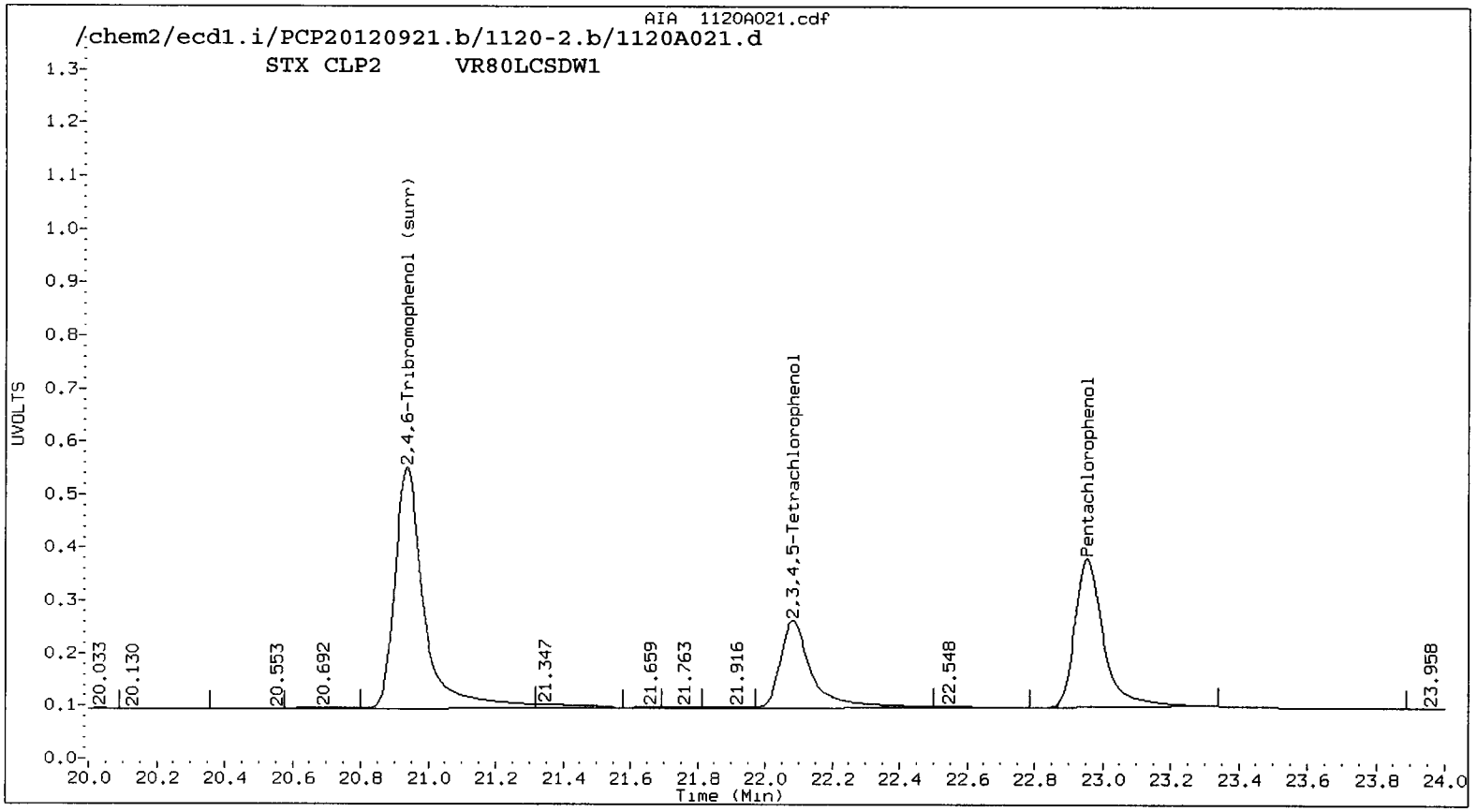
AIA 1120A021.cdf
STX CLP1 VR80LCSDW1
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.641
19.866
21.969
22.134
22.409
22.784
22.999
Time (Min)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STX CLP2 VR80LCSDW1
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.033
20.130
20.553
20.692
21.347
21.659
21.763
21.916
22.548
23.958
Time (Min)

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

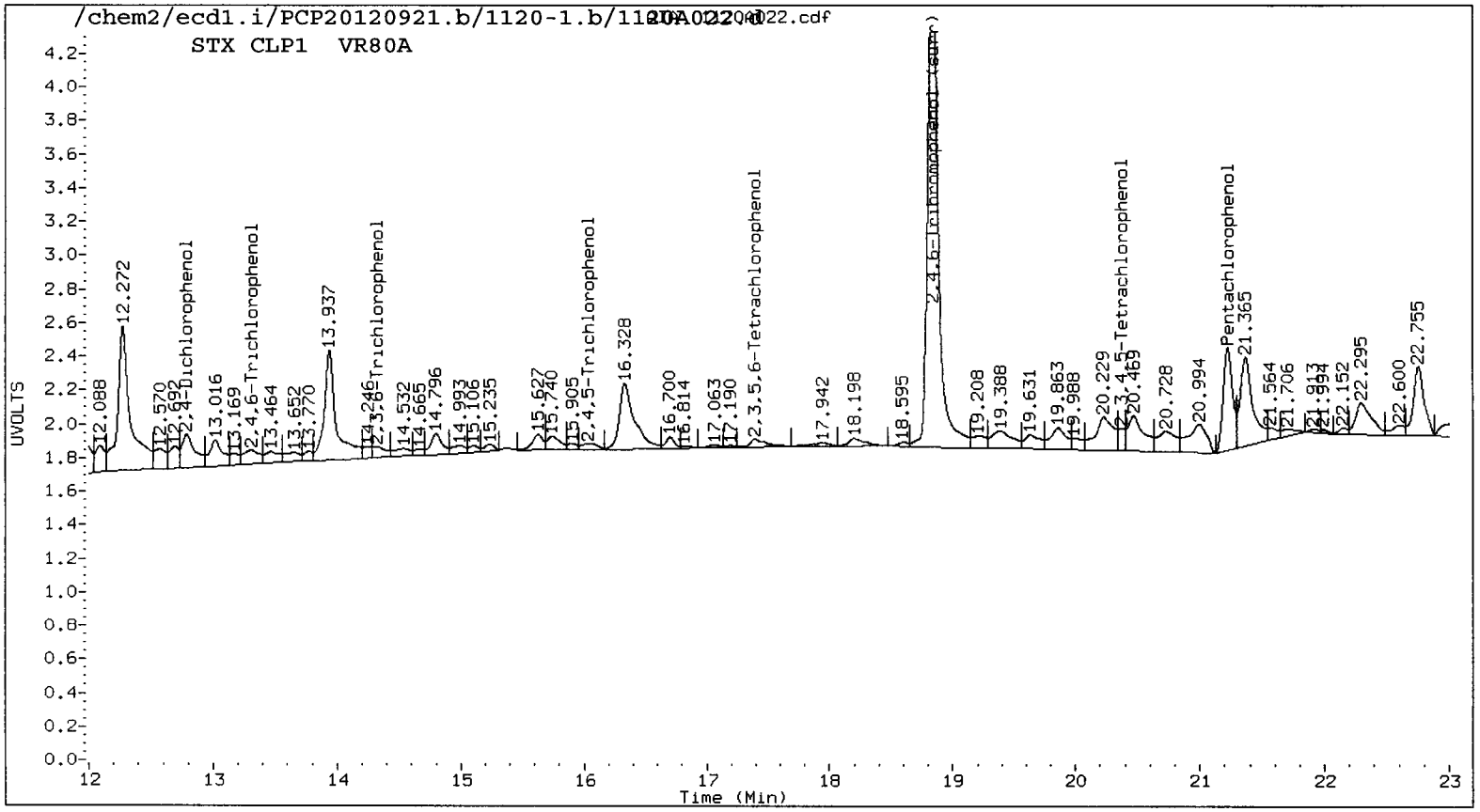
YZ 11/23/12

Data file 1: /chem2/ecd1.i/PCP20120921.b/1120-1.b/1120A022.d ARI ID: VR80A
Data file 2: /chem2/ecd1.i/PCP20120921.b/1120-2.b/1120A022.d Client ID: HT-01-W-C-121107
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 20-NOV-2012 22:59
Compound Sublist: all Report Date: 11/23/2012 10:45
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.224	0.022	159778	22.950	0.020	82453	2.4320	2.3103 J	5.1	Pentachlorophenol
13.302	0.006	36886	14.373	0.070	31359	1.1580	1.1468	1.0	2,4,6-Trichlorophenol
14.320	0.025	23143	15.598	0.050	10580	0.5405	0.4155	26.1	2,3,6-Trichlorophenol
16.038	-0.015	15248	17.469	0.006	10616	0.5533	0.5154	7.1	2,4,5-Trichlorophenol
----			----			0.0000	0.0000	---	2,3,4-Trichlorophenol
17.389	0.032	24025	18.816	0.023	29588	0.5112	1.0243	66.8*	2,3,5,6-Tetrachlorophe
20.373	0.004	20500	22.041	-0.015	42371	0.4687	2.0447	125.4*	2,3,4,5-Tetrachlorophe
12.788	0.036	72749	----			40.8325	0.0000	---	2,4-Dichlorophenol
18.833	0.026	884358	20.933	0.024	564443	18.1	18.7	3.2	2,4,6-Tribromophenol (s

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	72.5	74.9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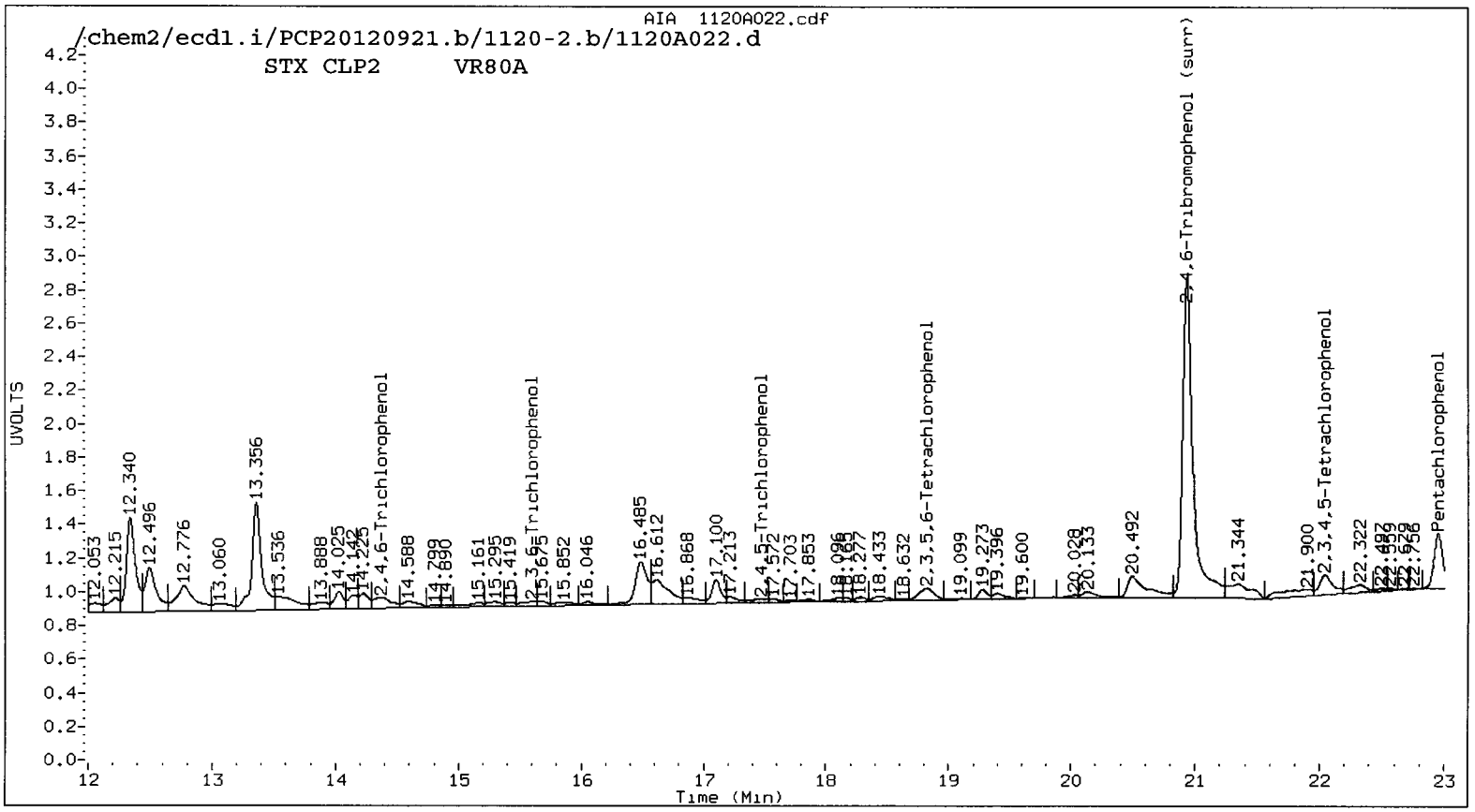
AIA 1120A022.cdf
STX CLP1 VR80A
UVOLTS
Time (Min)
12.272
2,4-Dichlorophenol
2,4,6-Trichlorophenol
13.937
2,4,6-Trichlorophenol
2,4,5-Trichlorophenol
16.328
2,3,5,6-Tetrachlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
21.365
22.755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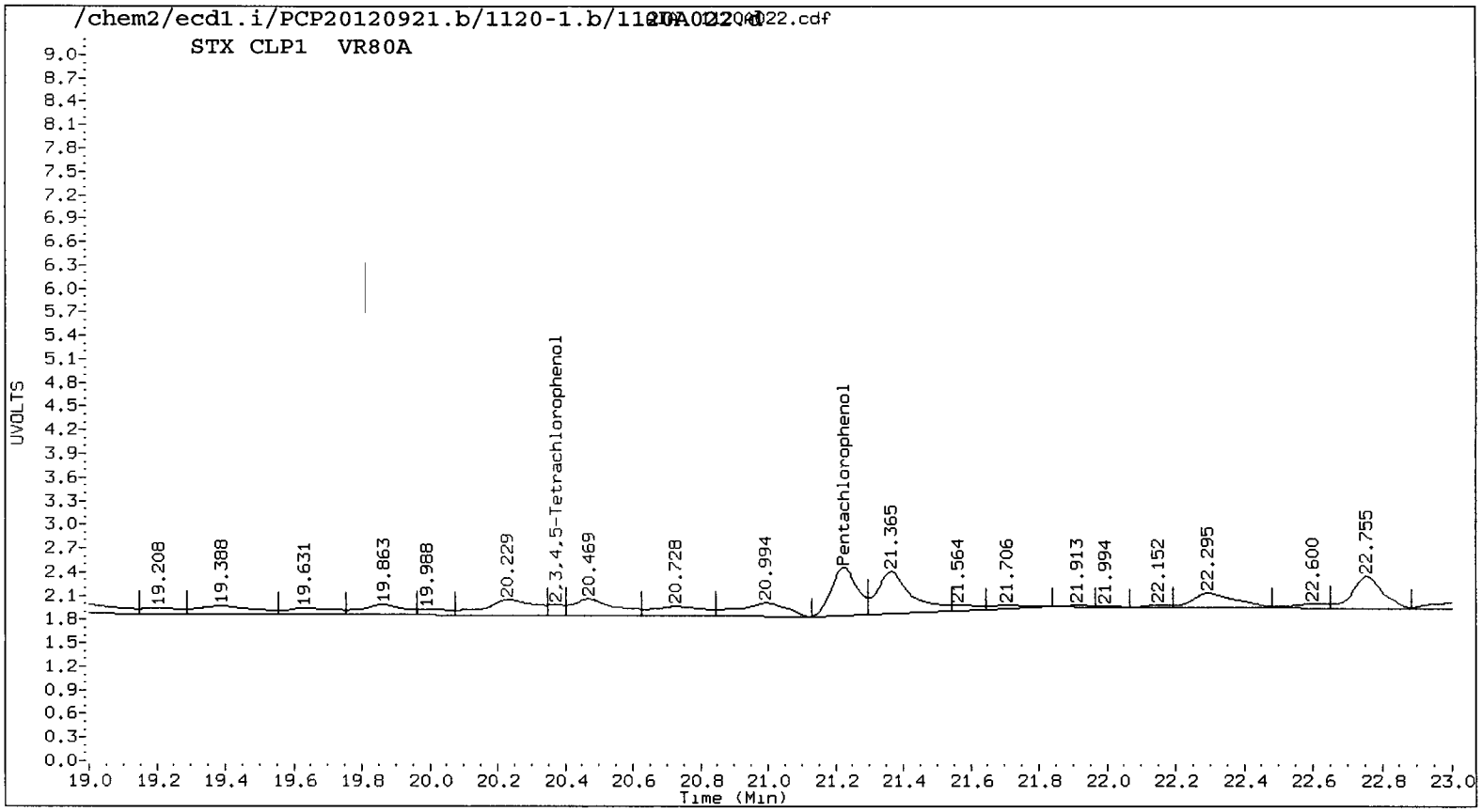
STX CLP2 VR80A
UVOLTS
Time (Min)
12.340
12.496
13.356
2,4,6-Trichlorophenol
2,4,5-Trichlorophenol
16.485
2,3,5,6-Tetrachlorophenol
2,4,6-Tribromophenol (surr)
20.492
21.344
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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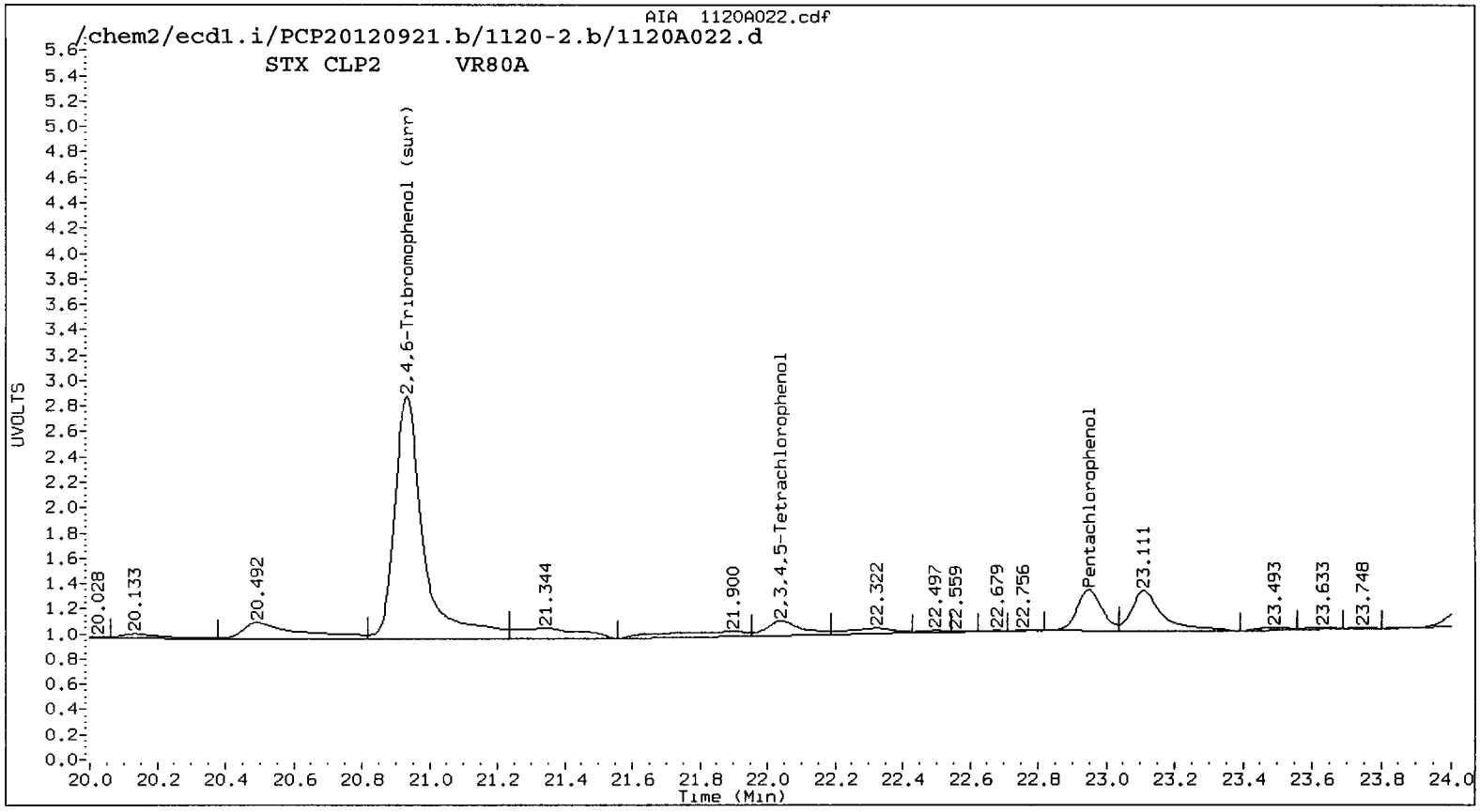
STX CLP1 VR80A
UVOLTS
Time (Min)
19.208
19.388
19.631
19.863
19.988
20.229
2,3,4,5-Tetrachlorophenol
20.469
20.728
20.994
Pentachlorophenol
21.365
21.564
21.706
21.913
21.994
22.152
22.295
22.600
22.755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STX CLP2 VR80A
UVOLTS
Time (Min)
20.028
20.133
20.492
2,4,6-Tribromophenol (surr)
21.344
21.900
2,3,4,5-Tetrachlorophenol
22.322
22.497
22.559
22.679
22.756
Pentachlorophenol
23.111
23.493
23.633
23.748

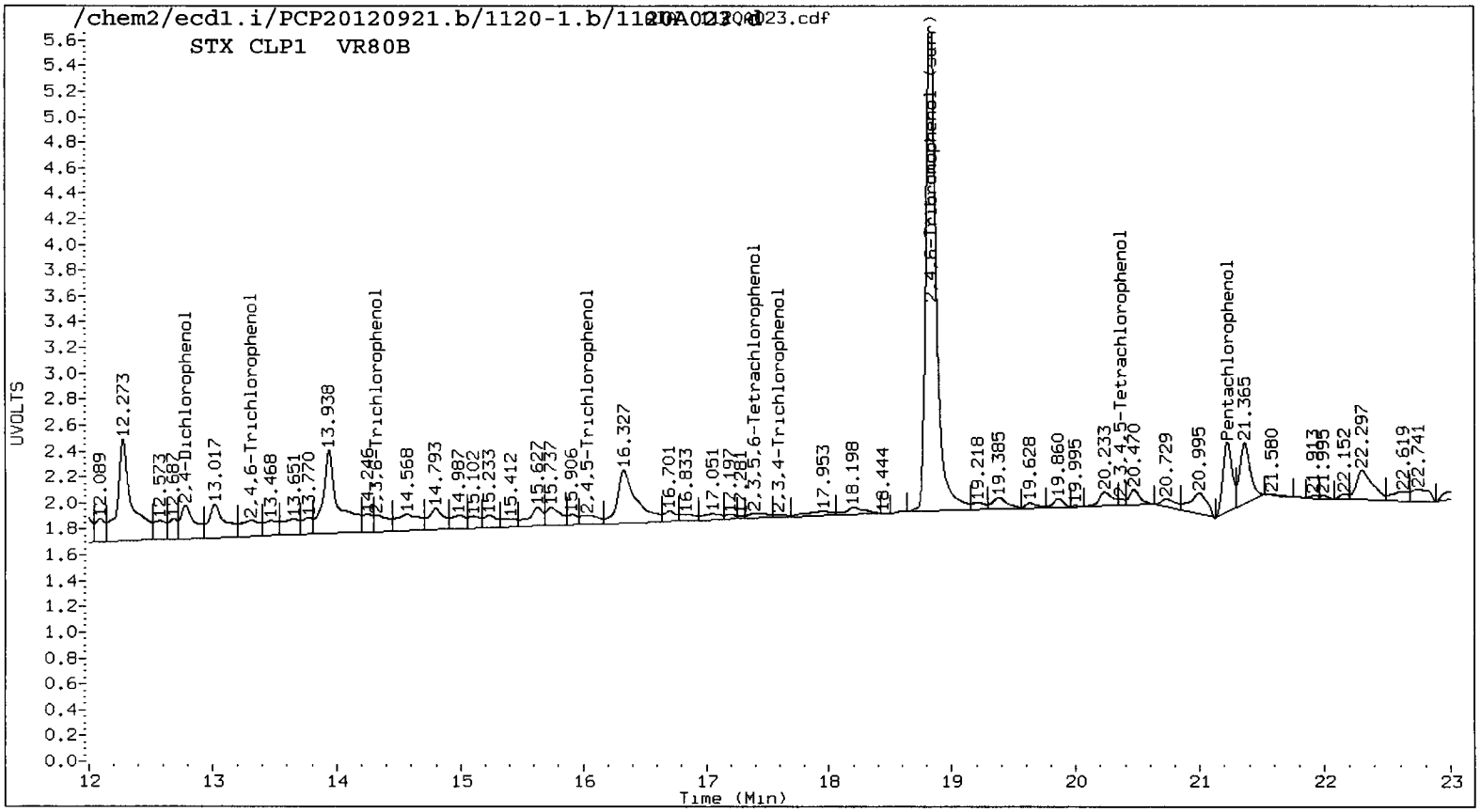
Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report XZ 11/23/12

Data file 1: /chem2/ecd1.i/PCP20120921.b/1120-1.b/1120A023.d ARI ID: VR80B
Data file 2: /chem2/ecd1.i/PCP20120921.b/1120-2.b/1120A023.d Client ID: HT-04-W-C-121107
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 20-NOV-2012 23:36
Compound Sublist: all Report Date: 11/23/2012 10:45
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.224	0.022	143231	22.950	0.020	69212	2.1762	1.9393	11.5	Pentachlorophenol
13.307	0.011	64262	----			2.0175	0.0000	---	2,4,6-Trichlorophenol
14.317	0.022	50270	----			1.1864	0.0000	---	2,3,6-Trichlorophenol
16.037	-0.016	34506	17.465	0.002	9477	1.2719	0.4590	93.9*	2,4,5-Trichlorophenol
17.586	0.022	8239	----			0.2552	0.0000	---	2,3,4-Trichlorophenol
17.390	0.032	21385	18.833	0.040	18310	0.4551	0.6339	32.8	2,3,5,6-Tetrachlorophe
20.368	-0.002	7253	22.040	-0.016	25807	0.1653	1.2454	153.1*	2,3,4,5-Tetrachlorophe
12.783	0.032	100767	----			57.2303	0.0000	---	2,4-Dichlorophenol
18.832	0.025	1128294	20.933	0.024	692462	23.9	23.0	3.9	2,4,6-Tribromophenol (

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	95.5	91.9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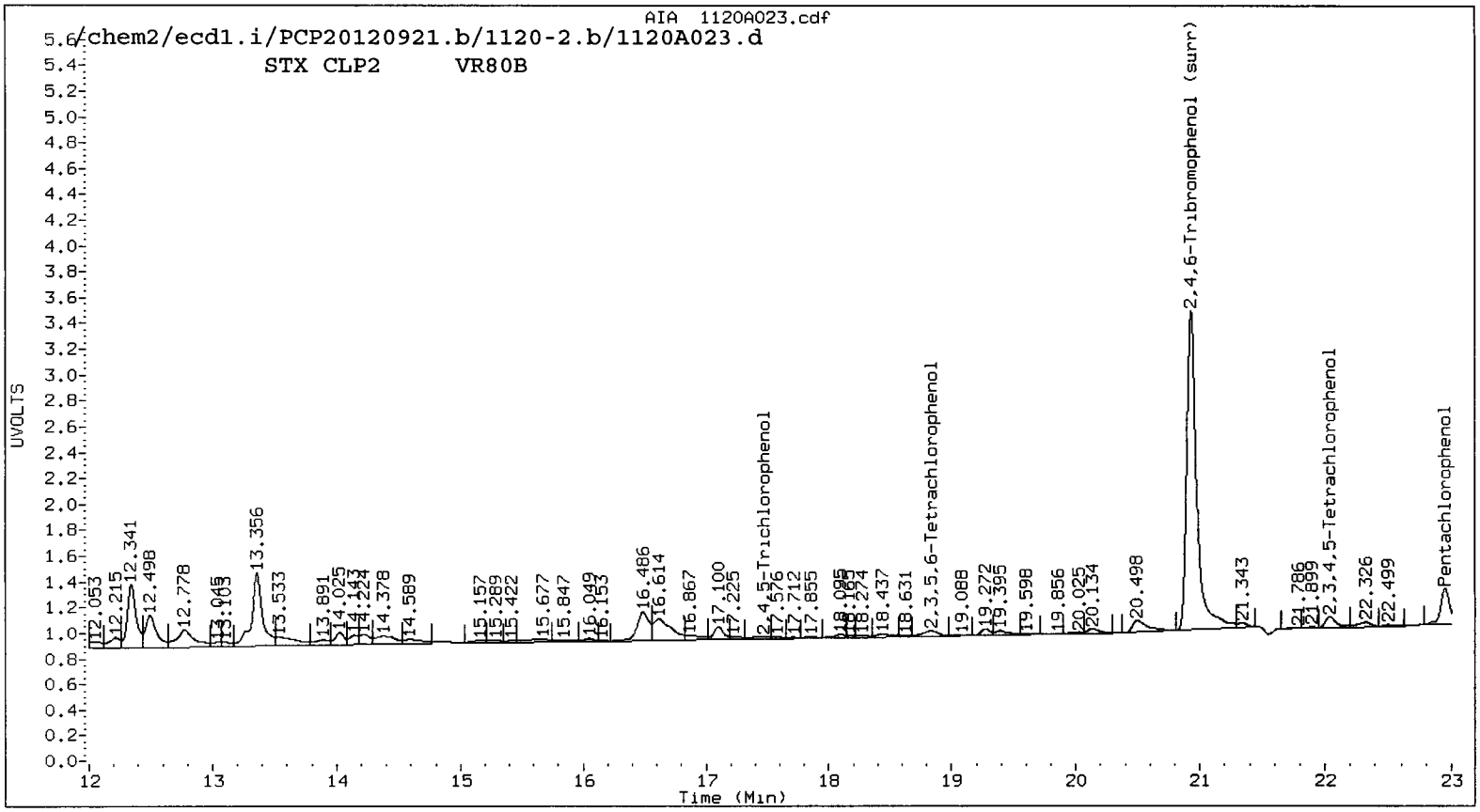
AIA 1120A023.cdf
STX CLP1 VR80B
UVOLTS
Time (Min)
2,4,6-Tribromophenol (surr)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,5-Trichlorophenol
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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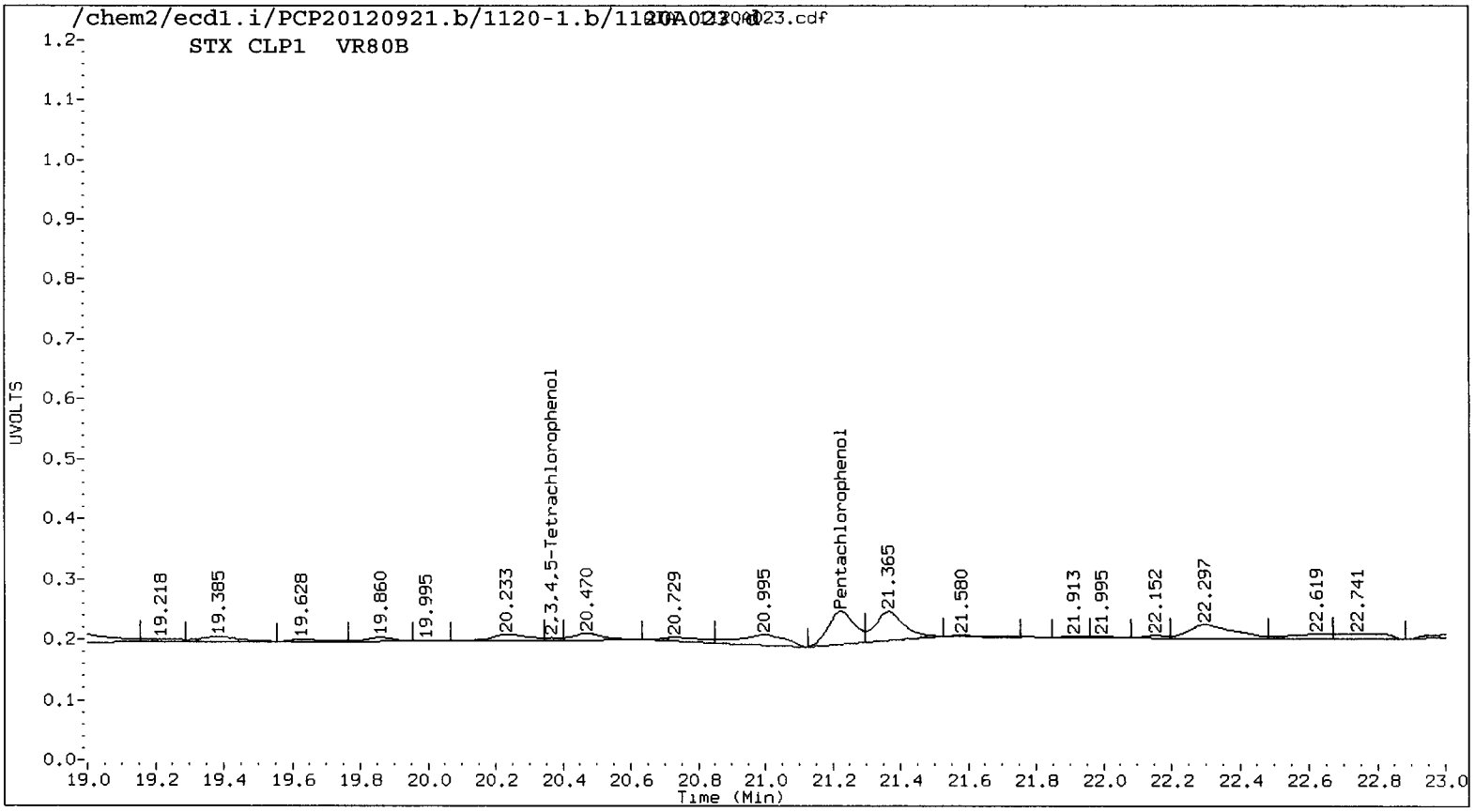
STX CLP2 VR80B
UVOLTS
Time (Min)
2,4,6-Tribromophenol (surr)
2,3,5,6-Tetrachlorophenol
2,4,5-Trichlorophenol
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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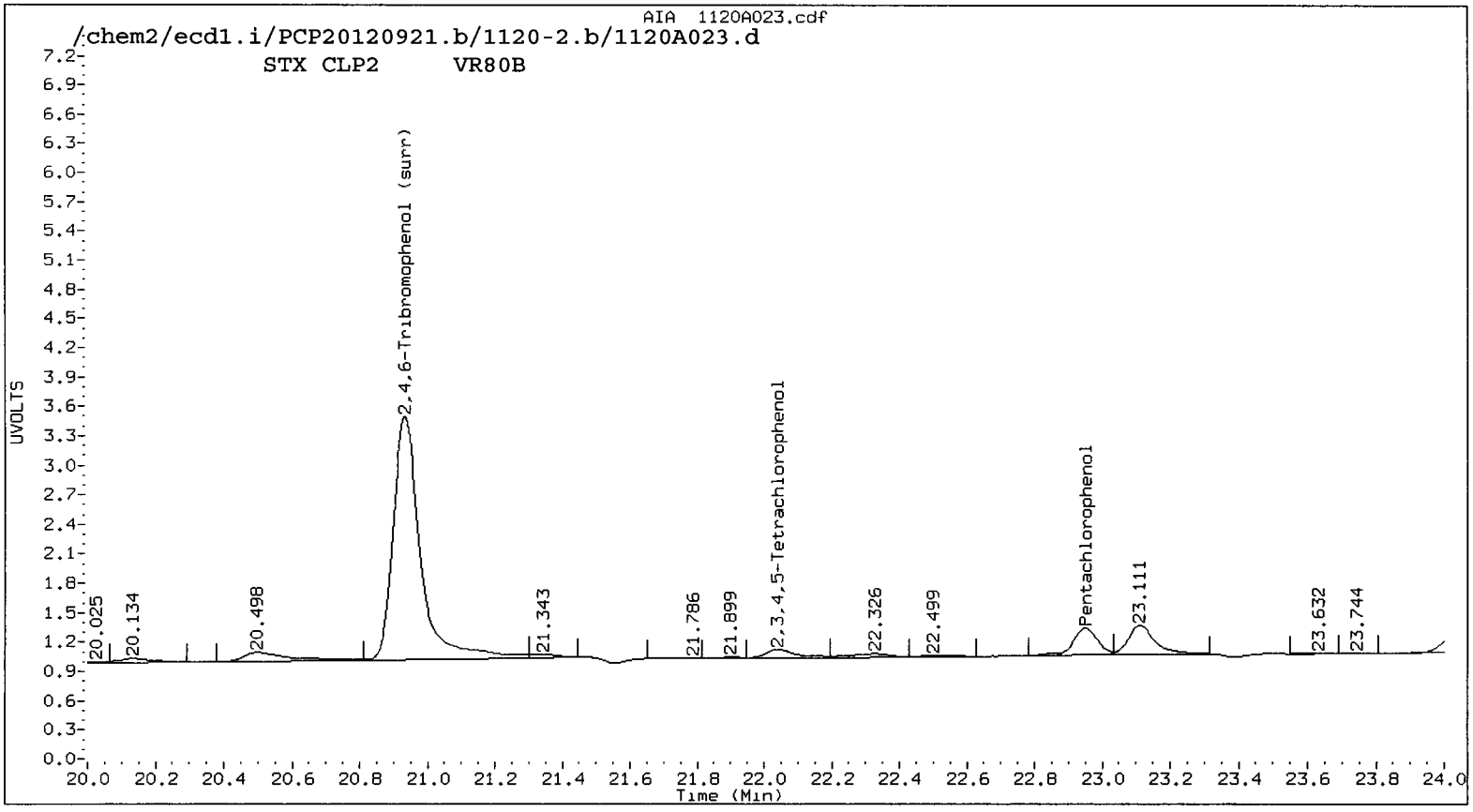
AIA 1120A023.cdf
STX CLP1 VR80B
UVOLTS
Time (Min)
19.218
19.385
19.628
19.860
19.995
20.233
2,3,4,5-Tetrachlorophenol
20.470
20.729
20.995
Pentachlorophenol
21.365
21.580
21.913
21.995
22.152
22.297
22.619
22.741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STX CLP2 VR80B
UVOLTS
Time (Min)
20.025
20.134
20.498
2,4,6-Tribromophenol (surr)
21.343
21.786
21.899
2,3,4,5-Tetrachlorophenol
22.326
22.499
Pentachlorophenol
23.111
23.632
23.744

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

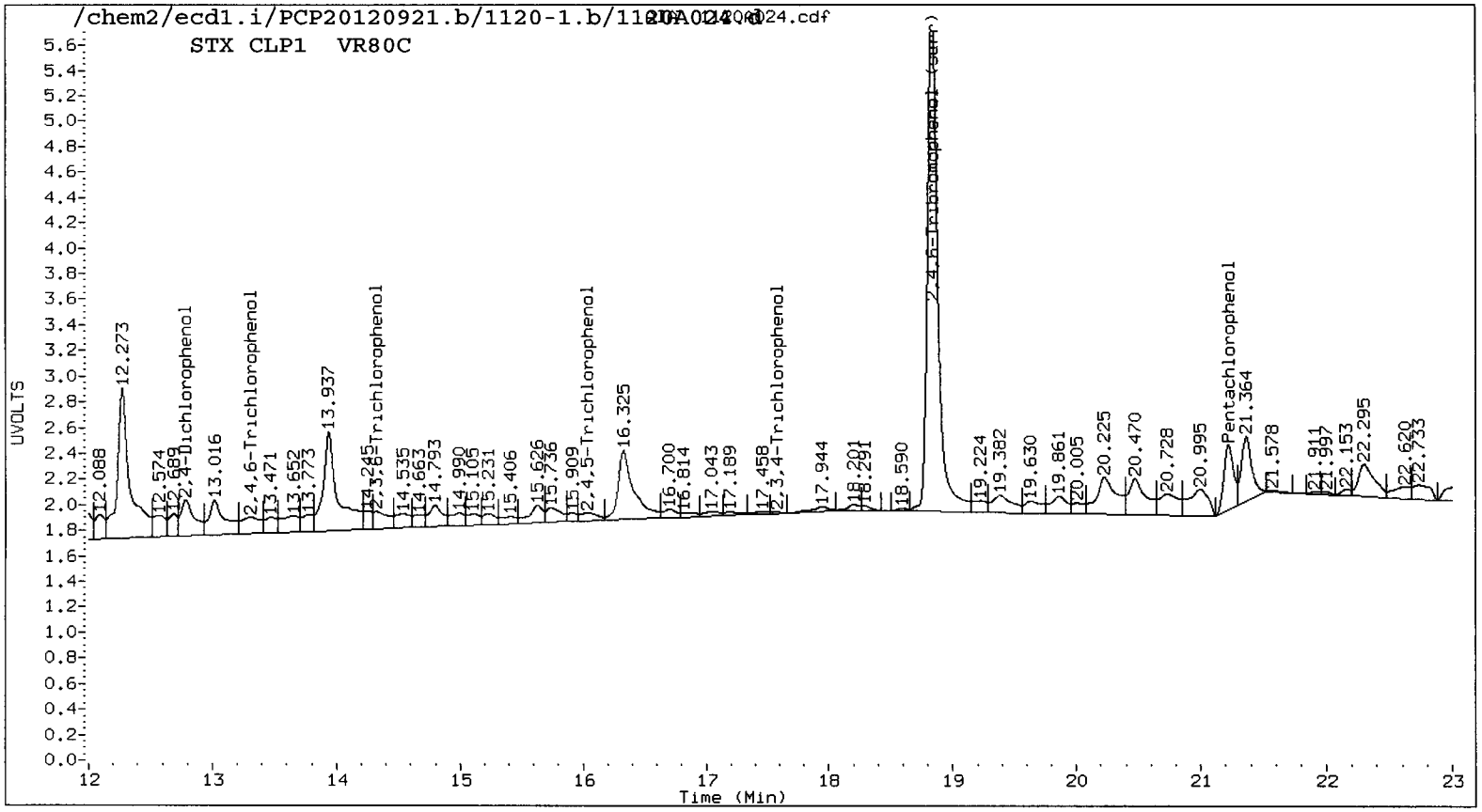
YC 11/23/12

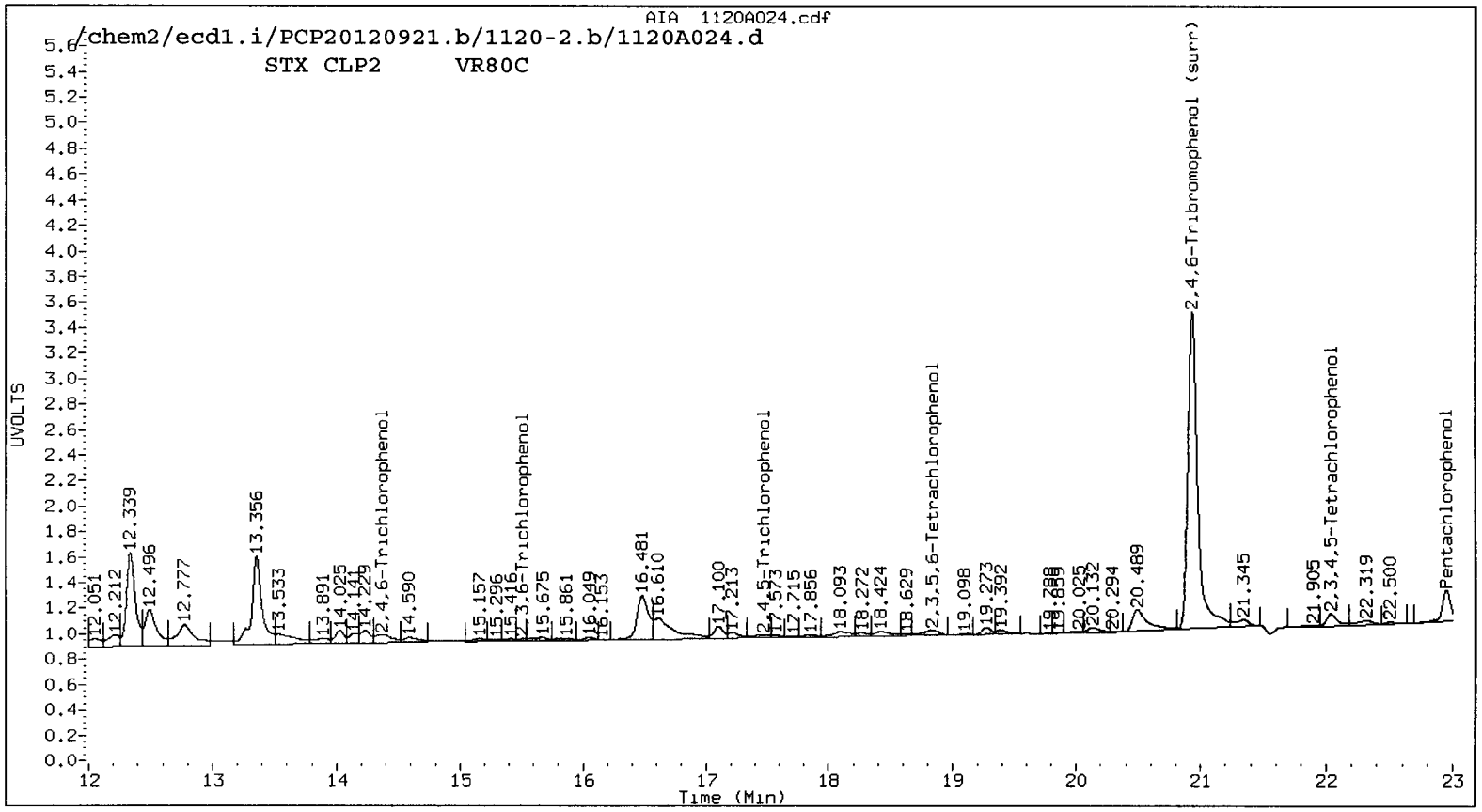
Data file 1: /chem2/ecd1.i/PCP20120921.b/1120-1.b/1120A024.d ARI ID: VR80C
Data file 2: /chem2/ecd1.i/PCP20120921.b/1120-2.b/1120A024.d Client ID: HT-04-W-C-dup-12110
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 21-NOV-2012 00:12
Compound Sublist: all Report Date: 11/23/2012 10:45
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.224	0.022	132739	22.950	0.020	61458	2.0144	1.7221	15.6	Pentachlorophenol
13.304	0.008	67473	14.373	0.070	30790	2.1183	1.1258	61.2*	2,4,6-Trichlorophenol
14.323	0.028	55517	15.508	-0.040	3481	1.3129	0.1363	162.4*	2,3,6-Trichlorophenol
16.038	-0.015	30535	17.470	0.007	10976	1.1219	0.5333	71.1*	2,4,5-Trichlorophenol
17.576	0.012	3326	----			0.1028	0.0000	---	2,3,4-Trichlorophenol
----			18.835	0.043	16963	0.0000	0.5873	---	2,3,5,6-Tetrachlorophe
----			22.037	-0.019	26223	0.0000	1.2655	---	2,3,4,5-Tetrachlorophe
12.785	0.033	108232	----			61.6624	0.0000	---	2,4-Dichlorophenol
18.832	0.025	1154305	20.932	0.023	682050	24.5	22.6	8.0	2,4,6-Tribromophenol (

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	98.0	90.5


/chem2/ecd1.i/PCP20120921.b/1120-1.b/1120A024.d
AIA 1120A024.cdf
STX CLP1 VR80C
UVOLTS
Time (Min)
12.273
2,4-Dichlorophenol
13.016
2,4,6-Trichlorophenol
13.937
2,3,5-Trichlorophenol
16.325
2,4,5-Trichlorophenol
17.458
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
21.364
Pentachlorophenol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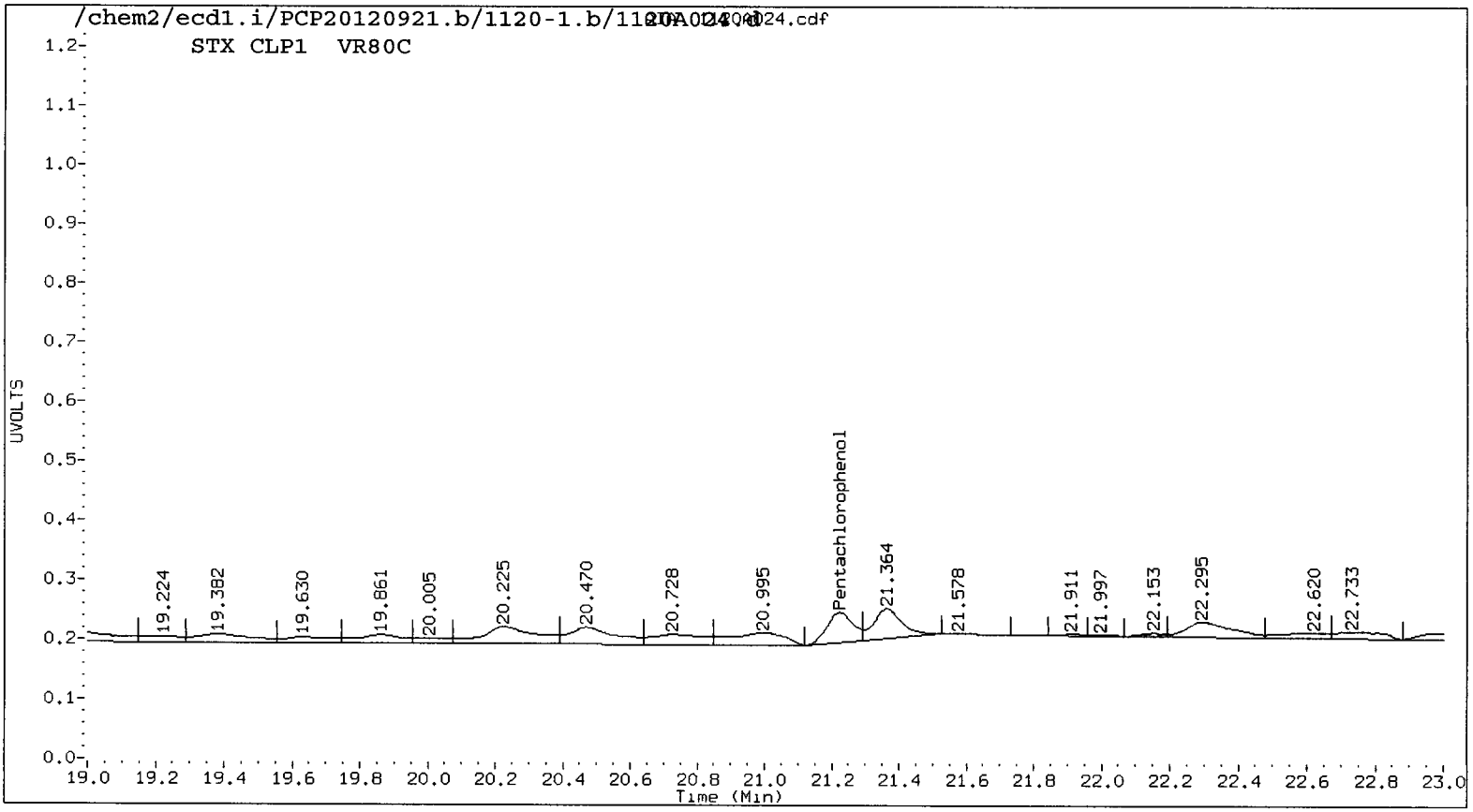
AIA 1120A024.cdf
STX CLP2 VR80C
UVOLTS
Time (Min)
12.339
13.356
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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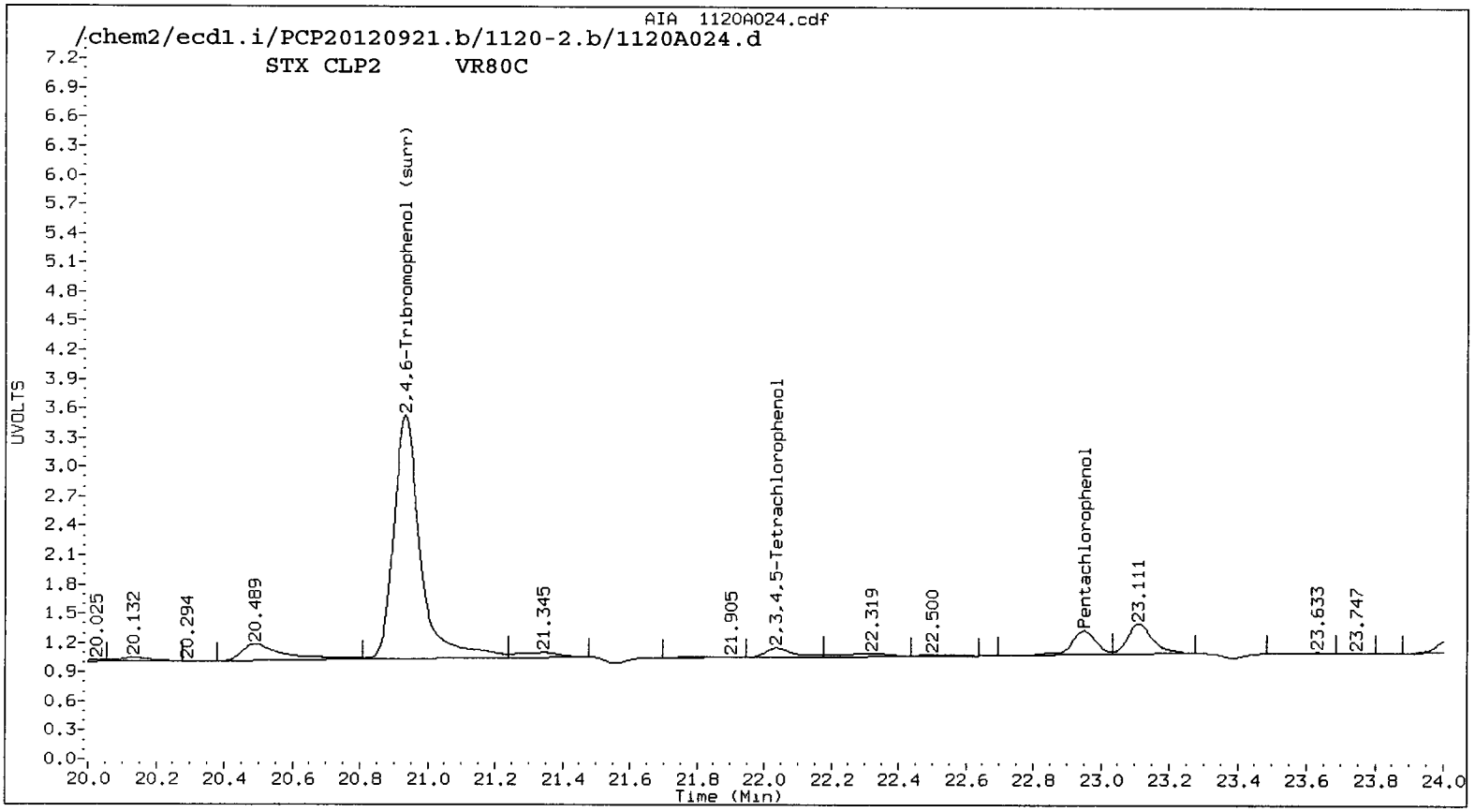
STX CLP1 VR80C
UVOLTS
Time (Min)
19.224
19.382
19.630
19.861
20.005
20.225
20.470
20.728
20.995
Pentachlorophenol
21.364
21.578
21.911
21.997
22.153
22.295
22.620
22.733


AIA 1120A024.cdf
/chem2/ecd1.i/PCP20120921.b/1120-2.b/1120A024.d
STX CLP2 VR80C
UVOLTS
Time (Min)
20.025
20.132
20.294
20.489
2,4,6-Tribromophenol (surr)
21.345
21.905
2,3,4,5-Tetrachlorophenol
22.319
22.500
Pentachlorophenol
23.111
23.633
23.747

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

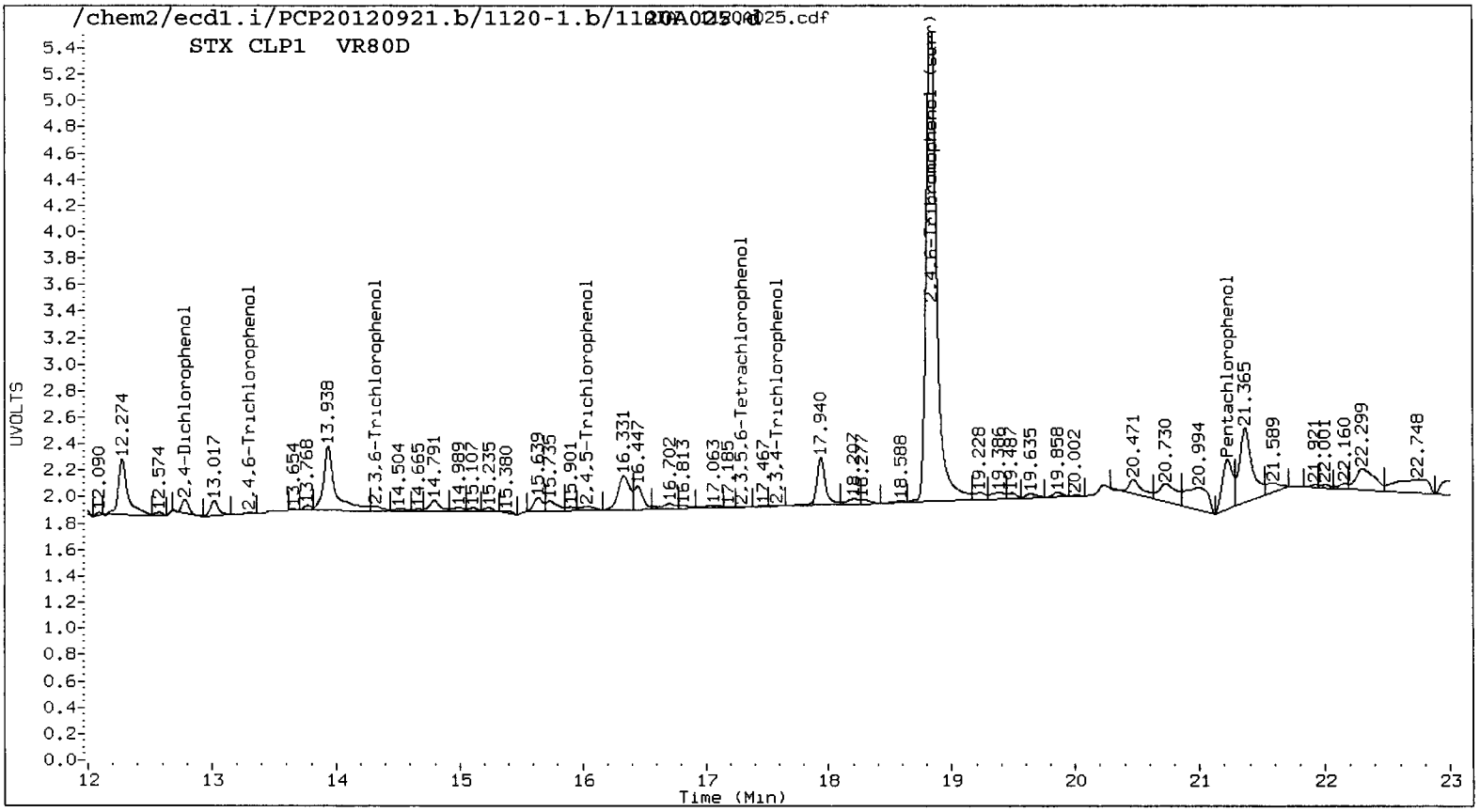
YZ 11/23/12

Data file 1: /chem2/ecd1.i/PCP20120921.b/1120-1.b/1120A025.d ARI ID: VR80D
Data file 2: /chem2/ecd1.i/PCP20120921.b/1120-2.b/1120A025.d Client ID: WS-10-W-C-121107
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 21-NOV-2012 00:48
Compound Sublist: all Report Date: 11/23/2012 10:45
Instrument: ecd1.i Matrix: WATER
Operator: ar Dilution Factor: 1.000

STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.228	0.026	110945	22.952	0.022	35027	~~1.6796~~	~~0.9815~~	52.5*	Pentachlorophenol
13.301	0.005	1722	----			0.0541	0.0000	---	2,4,6-Trichlorophenol
14.317	0.022	9989	----			0.2321	0.0000	---	2,3,6-Trichlorophenol
16.037	-0.016	12137	17.456	-0.007	8035	0.4393	0.3880	12.4	2,4,5-Trichlorophenol
17.577	0.012	3105	19.069	0.058	1962	0.0959	0.0675	34.8	2,3,4-Trichlorophenol
17.292	-0.065	2297	18.848	0.055	13816	0.0489	0.4783	162.9*	2,3,5,6-Tetrachlorophe
----			22.039	-0.017	25018	0.0000	1.2073	---	2,3,4,5-Tetrachlorophe
12.784	0.032	17251	----			9.4547	0.0000	---	2,4-Dichlorophenol
18.834	0.027	1105836	20.933	0.024	666855	23.3	22.1	5.4	2,4,6-Tribromophenol (

PERCENT RECOVERY

COMPOUND	Col1	Col2
2,4,6-TBP (surr)	93.3	88.5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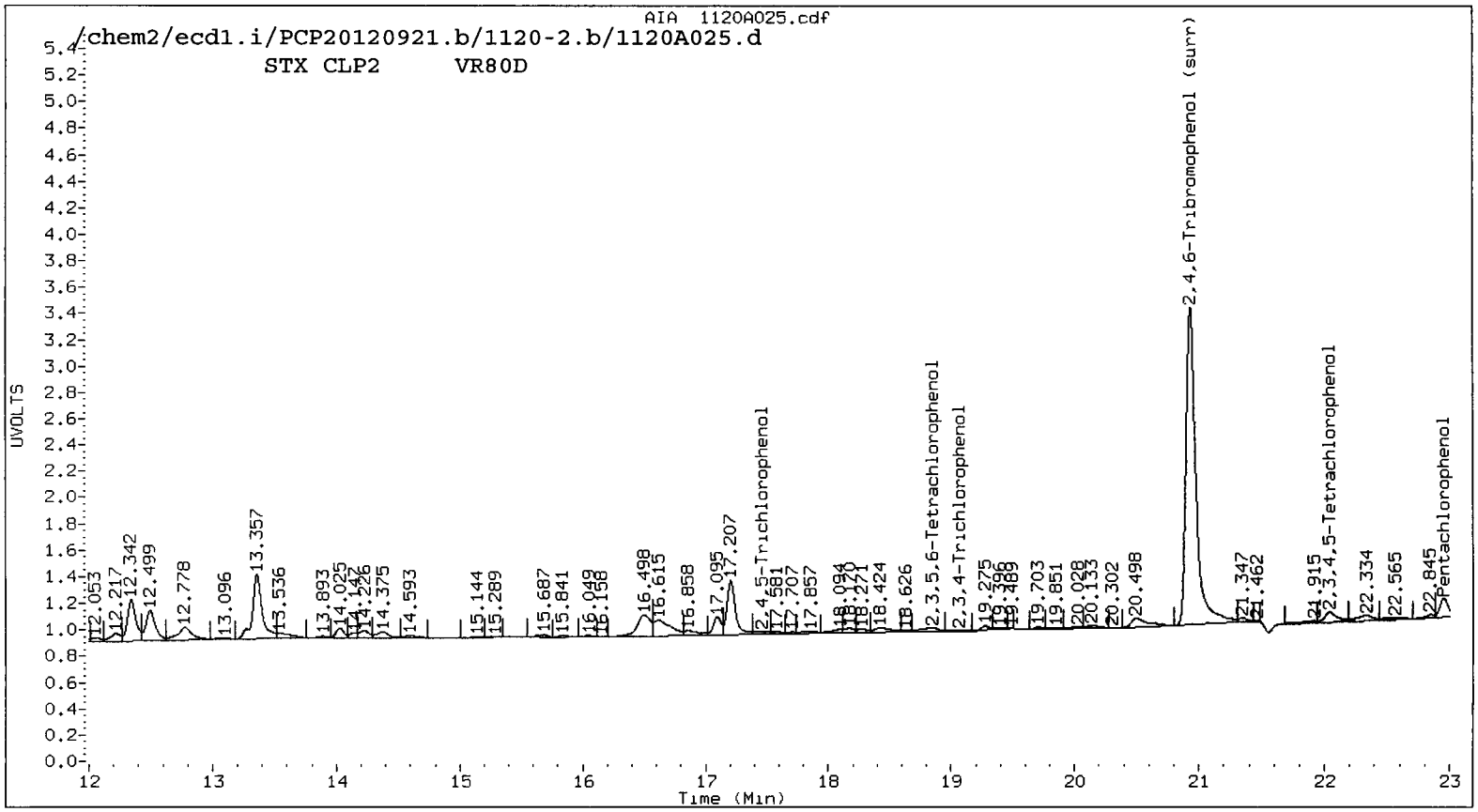
AIA 1120A025.cdf
STX CLP1 VR80D
UVOLTS
Time (Min)
12.090
12.274
12.574
2,4-Dichlorophenol
13.017
2,4,6-Trichlorophenol
13.654
13.768
13.938
2,3,6-Trichlorophenol
14.504
14.665
14.791
14.989
15.107
15.235
15.380
15.639
15.735
15.901
2,4,5-Trichlorophenol
16.331
16.447
16.702
16.813
17.063
17.185
2,3,5,6-Tetrachlorophenol
17.467
2,3,4-Trichlorophenol
17.940
18.207
18.297
18.588
2,4,6-Tribromophenol (surr)
19.228
19.386
19.487
19.635
19.858
20.002
20.471
20.730
20.994
Pentachlorophenol
21.365
21.589
22.160
22.299
22.748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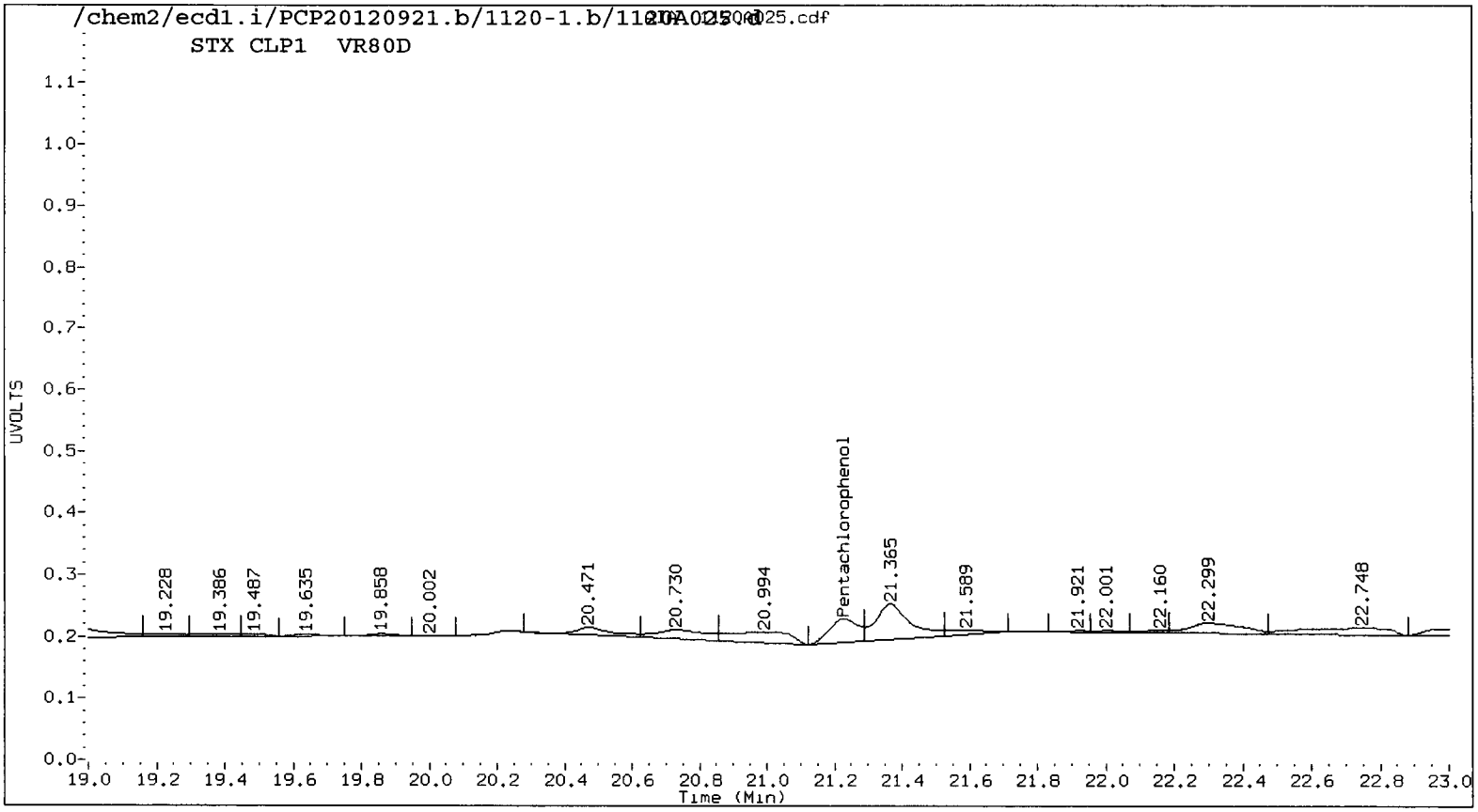
AIA 1120A025.cdf
STX CLP2 VR80D
UVOLTS
Time (Min)
12.053
12.217
12.342
12.499
12.778
13.096
13.357
13.536
13.893
14.025
14.226
14.375
14.593
15.144
15.289
15.687
15.841
16.049
16.198
16.498
16.615
16.858
17.095
17.207
2,4,5-Trichlorophenol
17.581
17.707
17.857
18.094
18.271
18.424
18.626
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
19.275
19.703
19.851
20.028
20.133
20.302
20.498
2,4,6-Tribromophenol (surr)
21.347
21.462
21.915
2,3,4,5-Tetrachlorophenol
22.334
22.565
22.845
Pentachlorophenol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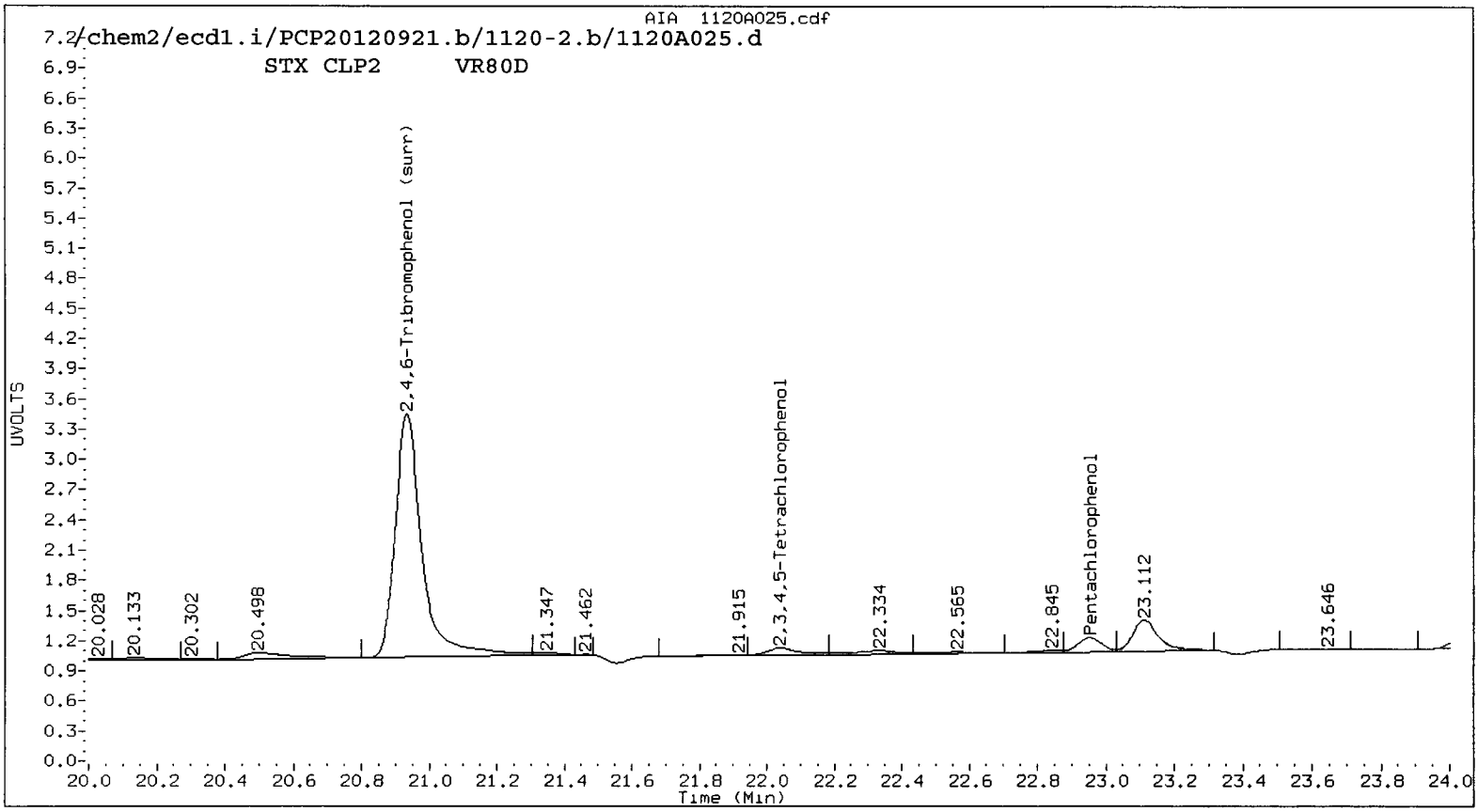
AIA 1120A025.cdf
STX CLP1 VR80D
UVOLTS
19.228
19.386
19.487
19.635
19.858
20.002
20.471
20.730
20.994
Pentachlorophenol
21.365
21.589
21.921
22.001
22.160
22.299
22.748
Time (Min)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STX CLP2 VR80D
UVOLTS
20.028
20.133
20.302
20.498
2,4,6-Tribromophenol (surr)
21.347
21.462
21.915
2,3,4,5-Tetrachlorophenol
22.334
22.565
22.845
Pentachlorophenol
23.112
23.646
Time (Min)

Analytical Resources Inc.
Dual Column 8041 Chlorinated Phenols Quantitation Report

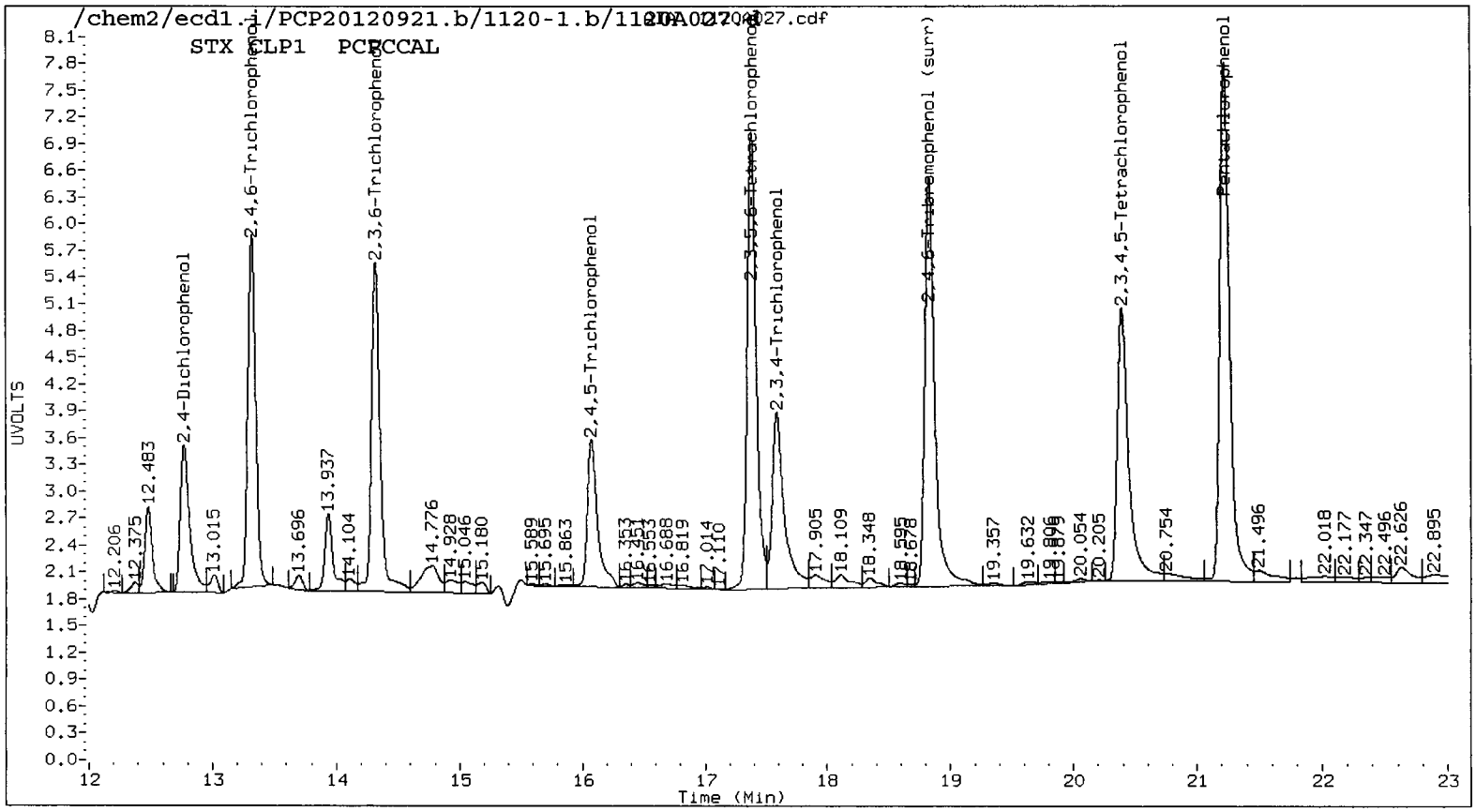
YZ 11/23/12

Data file 1: /chem2/ecd1.i/PCP20120921.b/1120-1.b/1120A027.d ARI ID: PCPCCAL
Data file 2: /chem2/ecd1.i/PCP20120921.b/1120-2.b/1120A027.d Client ID:
Method: /chem2/ecd1.i/PCP20120921.b/PCP.m Injection Date: 21-NOV-2012 02:01
Compound Sublist: all Report Date: 11/23/2012 10:45
Instrument: ecd1.i Matrix: NONE
Operator: ar Dilution Factor: 1.000

STX CLP1 Col			STX CLP2 Col			STX CLP1	STX CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound
21.224	0.022	1610063	22.951	0.021	987922	28.4450	27.6816	2.7	Pentachlorophenol
13.318	0.022	864494	14.326	0.022	630346	27.1406	27.3885	0.9	2,4,6-Trichlorophenol
14.318	0.023	914329	15.569	0.022	539274	28.7260	26.2371	9.1	2,3,6-Trichlorophenol
16.075	0.022	476349	17.485	0.022	288371	23.8178	22.0956	7.5	2,4,5-Trichlorophenol
17.587	0.022	679304	19.032	0.021	373476	28.2092	22.4992	22.5	2,3,4-Trichlorophenol
17.380	0.022	1310267	18.815	0.022	774968	27.8822	26.8289	3.9	2,3,5,6-Tetrachloroph
20.391	0.022	991799	22.077	0.021	563216	27.7520	27.1788	2.1	2,3,4,5-Tetrachlorophe
12.773	0.021	433521	13.838	0.021	244370	280.5520	238.0815	16.4	2,4-Dichlorophenol
18.830	0.022	1298388	20.930	0.021	828083	28.1	27.5	2.2	2,4,6-Tribromophenol (

PERCENT RECOVERY

COMPOUND	Col1	Col2
Pentachlorophenol	113.8	110.7
2,4,6-Trichlorophenol	108.6	109.6
2,3,6-Trichlorophenol	114.9	104.9
2,4,5-Trichlorophenol	95.3	88.4
2,3,4-Trichlorophenol	112.8	90.0
2,3,5,6-Tetrachlorophenol	111.5	107.3
2,3,4,5-Tetrachlorophenol	111.0	108.7
2,4-Dichlorophenol	112.2	95.2
2,4,6-TBP (surr)	112.3	109.9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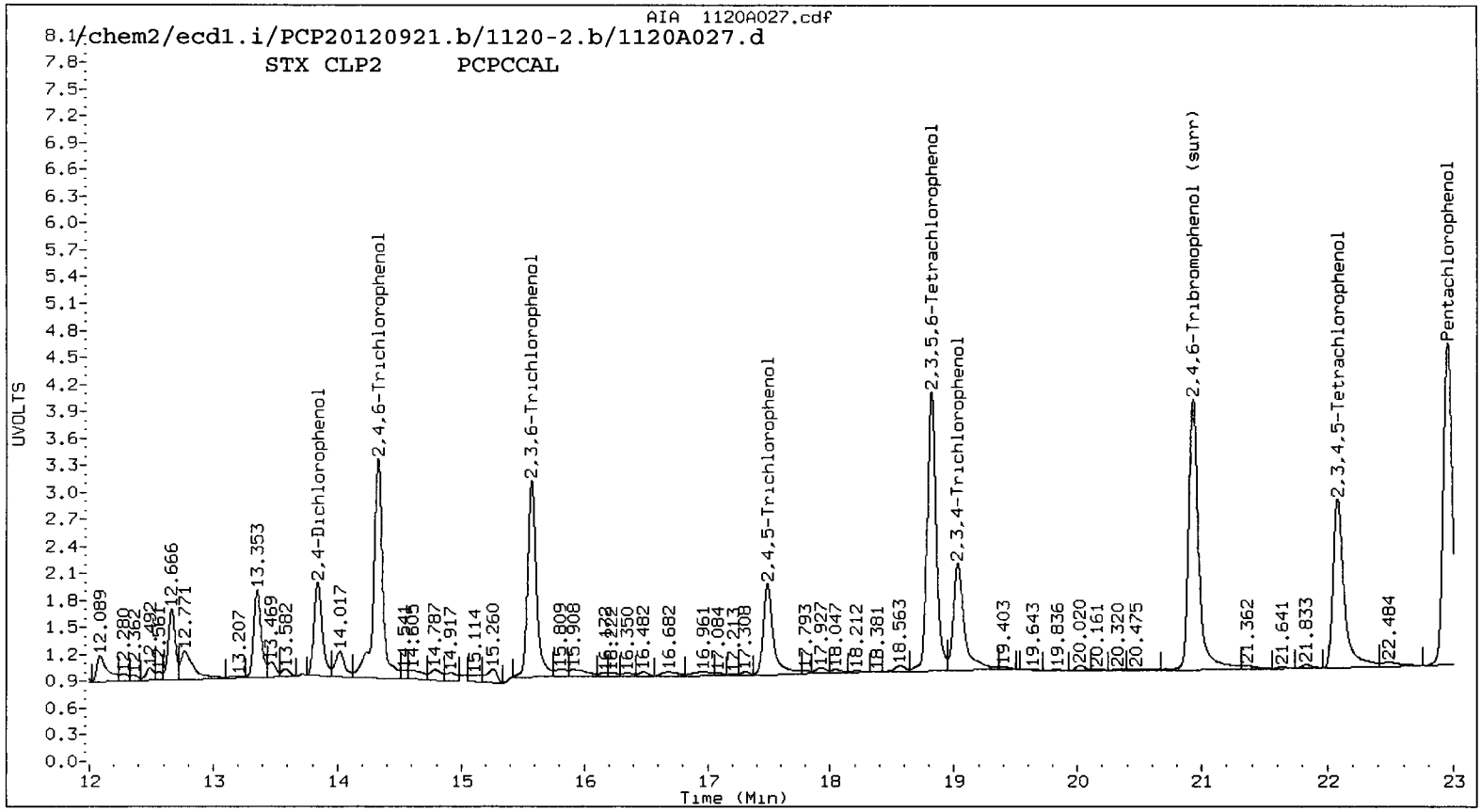
AIA 1120A027.cdf
STX CLP1 PCPCCAL
UVOLTS
Time (Min)
2,4,6-Trichlorophenol
2,4-Dichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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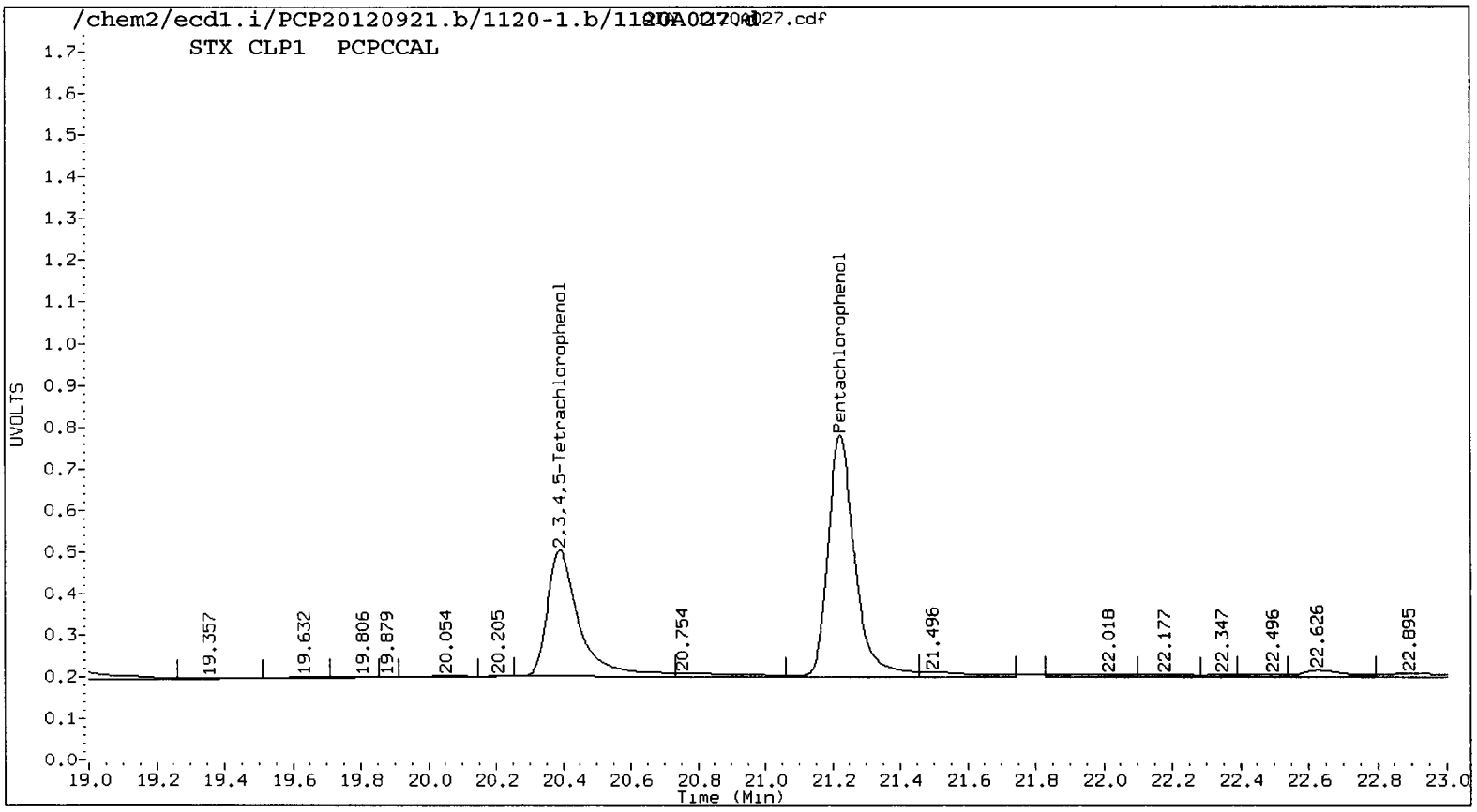
STX CLP2 PCPCCAL
UVOLTS
Time (Min)
2,4-Dichlorophenol
2,4,6-Trichlorophenol
2,3,6-Trichlorophenol
2,4,5-Trichlorophenol
2,3,5,6-Tetrachlorophenol
2,3,4-Trichlorophenol
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol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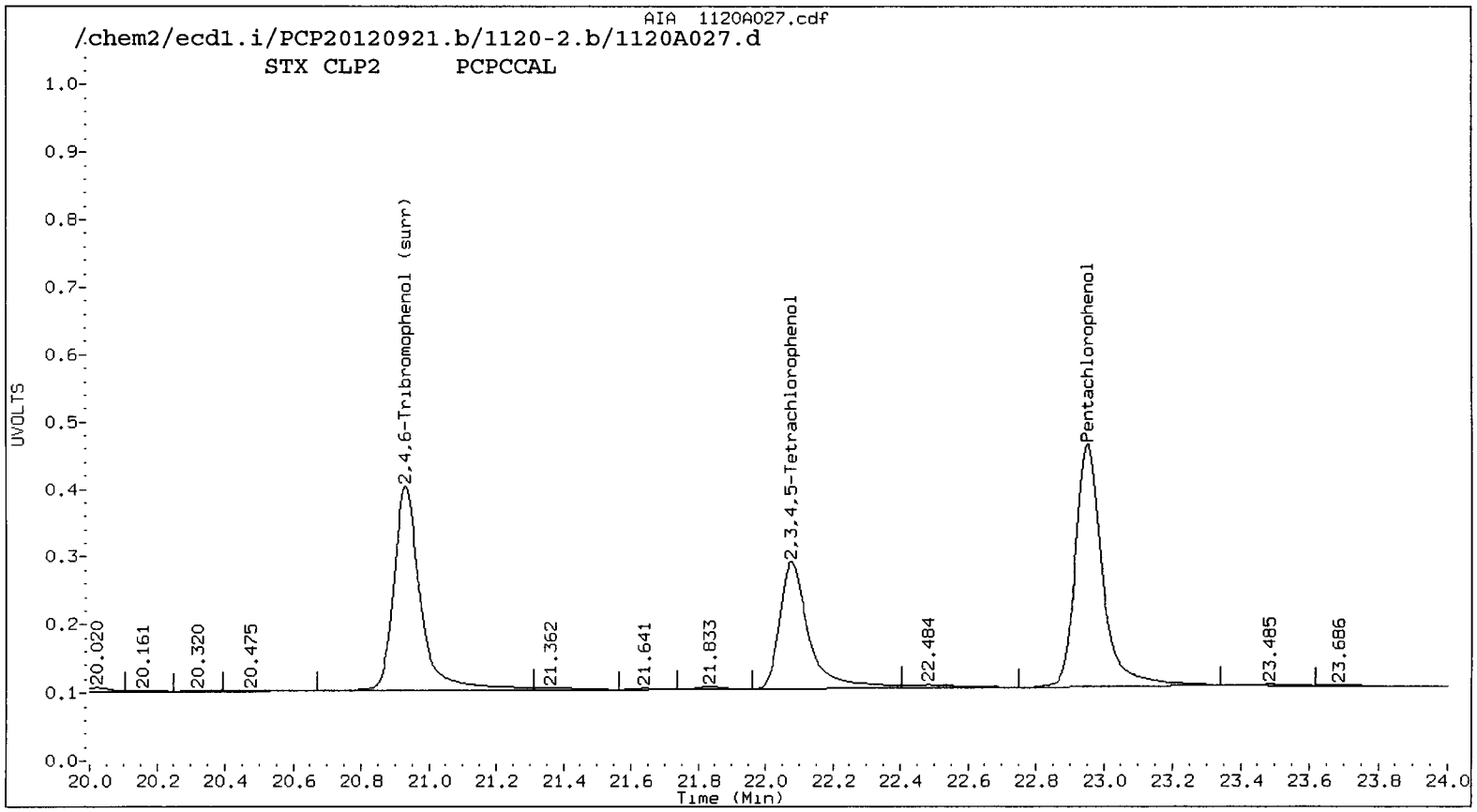
AIA 1120A027.cdf
STX CLP1 PCPCCAL
UVOLTS
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
19.357
19.632
19.806
19.879
20.054
20.205
20.754
21.496
22.018
22.177
22.347
22.496
22.626
22.895
Time (Min)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STX CLP2 PCPCCAL
UVOLTS
2,4,6-Tribromophenol (surr)
2,3,4,5-Tetrachlorophenol
Pentachlorophenol
20.020
20.161
20.320
20.475
21.362
21.641
21.833
22.484
23.485
23.686
Time (Min)

Metals Raw Data
Preparation Bench Sheets and Notes

ARI Job ID: VR80

Analyst: CB

Date: 11-12-12

Final Volume —

Final Volume (Hg): 20.0

Sample ID VR80 ASPK, MBSPK

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg	Twn	CVA	1.0	0.02	2903-7
Hg MBSPK	Twn	CVA	1.0	0.04	2903-7
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

5033F

5033F

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: CB

Date: 11-12-12

Final Volume –

Final Volume (Hg): 20.0

Sample ID URSC ESpk, MBSpk

	Prepcode.			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg	0mm	CVA	1.0	0.02	2908-7
Hg MBSPK	0mm	CVA	1.0	0.04	2908-7
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: TWM Matrix: WATER
Analyst: CB Date: 11-12-12
Bath Temp: 95°C Start Time: 1100 End Time: 1300

ARI Sample ID	Sample Bottle #	pH<2	Initial ~~Weight~~ (g) Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
VA80 A	1	✓	20.0	20.0	11/24 1	Y	
" ADup	1	✓			1		
" ASpK	1	✓			1		
" B	1	✓			1		
" C	1	✓			1		
" D	1	✓			1		
" MBl	—	—			1		
" MBlSpK	—	—			1	Y	
VA88 A	10	✓			11/19 1	N	
ADup	10	✓			1		
ASpK	10	✓			1		
B	6	✓			1		
C	6	✓			1		
MBl	—	—			1		
MBlSpK	—	—			1	N	
VA73 A	7	✓			11/18 1	N	
" B	7	✓			1		
" MBl	—	—			1		
" MBlSpK	—	—	20.0	20.0	1	N	
			11-12-12 CB				

Chemical/Reagent ID:

HNO_3: I7833 H_2SO_4: J7677 HCl: —

5% $K_2S_2O_8$: MP2375 5% $KMnO_4$: MP2372 Digest Tube Lot: 120113

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: DMM Matrix: WATER
Analyst: CB Date: 11-12-12
Bath Temp: 90°C Start Time: 1100 End Time: 1300

ARI Sample ID	Sample Bottle #	pH<2	Initial ~~Weight (g)~~ Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
VR80 E	1	-	20.0	20.0	11/24 1	Y	
" Edup	1	-			1		
" ESpik	1	-			1		
" F	1	-			1		
" G	1	-			1		Filter +
" H	1	-			1		preserved in 10%
" mB2	-	-			1		
" mB2spk	-	-			1	Y	
VR73 C	1	-			11/18 1	N	
" D	1	-			1		
" mB2	-	-			1		
" mB2spk	-	-	20.0	20.0	1	N	

11-12-12 CB

Chemical/Reagent ID:

HNO_3: MP2342 17833 H_2SO_4: 176 77 HCl: -

5% $K_2S_2O_8$: MP2325 5% $KMnO_4$: MP2376 Digest Tube Lot: 120743

Analyst: CG

Date: 11-13-12

Final Volume REN: 25.0 TWC: 50.0

Final Volume (Hg): ~

Sample ID 1R80 ASpk / MBSpk

	Prepcode:	TWC		
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:	2977-9		
	Vol Added (mL):	0.50		
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000 ↓	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000 ↓	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	REN	REN	REN
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	2987-2	2756-7	2952-1
	0.05	0.05	0.50
Ag	25 ↓		
Al			500
As	25 ↓		
Ba	25 ↓		
Be	25 ↓		
Ca			500
Cd	25 ↓		
Co	25		
Cr	25 ↓		
Cu	25 ↓		
Fe			500 ↓
K			500
Mg			500
Mn	25 ↓		
Mo		25	
Na			500
Ni	25 ↓		
Pb	25 ↓		
Sb		25 ↓	
Se	80 ↓		
Tl	25 ↓		
U	25		
V	25		
Zn	80 ↓		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: EB

Date: 11-13-12

Final Volume 25.0

Final Volume (Hg):

Sample ID VR8C ESPK, MBSPK

	Prepcode			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	REN ICP-MS #1	REN ICP-MS #2	REN ICP-MS Minerals
	2987-2	2956-7	2952-1
	0.05	0.05	0.50
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: LB Date: 12-12-12 Time:

Matrix: WATER Block ID: Block Temp: Thermometer:

ARI Sample ID	Btl #	pH<2	Prep Code: AE1 Initial ~~Wt (g)~~ Vol (mL)	Prep Code: AE1 Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
LCS1 A	1	✓	50	25			
" B	"	✓					
" MB	"	"					
" MBDUP	"	"					
LCS2 A	1	✓					
" ASMP	1	✓					
" ASMPDUP	1	✓					
" B	1	✓					
" C	1	✓					
" D	1	✓					
" MB1	"	"					
" MB1DUP	"	"					
" E	1	"					
" ECHO	1	"					
" ESMP	1	"					
" F	1	"					
" G	1	"					
" H	1	"					
" MB2	"	"					
" MB2DUP	"	"	10	25			

Chemical/Reagent ID:

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: CB Date: 11-13-12 Time: 0810

Matrix: WATER Block ID: #7 Block Temp: 90°C Thermometer: M028

ARI Sample ID	Btl #	pH<2	Prep Code: TWC Initial ~~Wt~~ (g) Vol (mL)	Prep Code: TWC Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
VR80 A	1	✓	50.0	50.0			
" AdvP	1	✓					
" ASOR	1	✓					
" B	1	✓					
" C	1	✓					
" D	1	✓					
" MBI	-	-		✓			
" MBlsor	-	-	50.0	50.0			
			11-13-12 CB				

Chemical/Reagent ID: HNO3: I7833 [illegible] Tube: .04 H 120713

5061F

Version 005
1/10/12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: NB

Date: 12-06-12

Final Volume 20.0

Final Volume (Hg):

Sample ID VR80R ASPK, ~~ESPK~~ NB 12-06-12

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	REN		
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	2987-2		
	0.04		
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25 ✓		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

5033F

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: NB

Date: 12-06-12

Final Volume 20.0

Final Volume (Hg):

Sample ID VR80R ESPK

	Prepcode:			
	Spike Solution:	ICP Routine	ICP No GFA	GFA
	Standard No.:			
	Vol Added (mL):			
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	REN		
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	2987-2		
	0.04		
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25 ✓		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: NB

Date: 12-06-12

Final Volume 25.0

Final Volume (Hg):

Sample ID VR80R MB15PK

Prepcode:				
Spike Solution:		ICP Routine	ICP No GFA	GFA
Standard No.:				
Vol Added (mL):				
STOCK CONCENTRATION	Ag	50		2.0
	Al	200	200	
	As	200		10
	Ba	200	200	
	Be	50	50	
	Ca	1000	1000	
	Cd	50		2.0
	Co	50	50	
	Cr	50	50	
	Cu	50	50	
	Fe	200	200	
	K	1000	1000	
	Mg	1000	1000	
	Mn	50	50	
	Na	1000	1000	
	Ni	50	50	
	Pb	200		10
	Se	200		10
	Sr	50	50	
	Tl	200		10
	V	50	50	
	Zn	50	50	

	REN		
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	2987-2		
	0.05		
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25 ✓		
Fe			500
K			500
Mg			500
Mn	25		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

12-21-12 : 15:15:57

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SPIKING LOG

Analyst: NB **Final Volume** 25.0 **Sample ID** VR80R MB25PK

Date: 12-06-12 **Final Volume (Hg):**

		Prepcode:			
		Spike Solution:	ICP Routine	ICP No GFA	GFA
		Standard No.:			
		Vol Added (mL):			
	Ag		50		2.0
S	Al		200	200	
T	As		200		10
O	Ba		200	200	
C	Be		50	50	
K	Ca		1000	1000	
	Cd		50		2.0
	Co		50	50	
C	Cr		50	50	
O	Cu		50	50	
N	Fe		200	200	
C	K		1000	1000	
E	Mg		1000	1000	
N	Mn		50	50	
T	Na		1000	1000	
R	Ni		50	50	
A	Pb		200		10
T	Se		200		10
I	Sr		50	50	
O	Tl		200		10
N	V		50	50	
	Zn		50	50	

	REN		
	ICP-MS #1	ICP-MS #2	ICP-MS Minerals
	2987-2		
	0.05		
Ag	25		
Al			500
As	25		
Ba	25		
Be	25		
Ca			500
Cd	25		
Co	25		
Cr	25		
Cu	25		
Fe			500
K			500
Mg			500
Mn	25 ✓		
Mo		25	
Na			500
Ni	25		
Pb	25		
Sb		25	
Se	80		
Tl	25		
U	25		
V	25		
Zn	80		

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std No.
Hg		CVA	1.0		
Hg MBSPK		CVA	1.0		
Sb		ICP	2000		
Sb		GFA	100		
B		ICP	500		
Mo		ICP	500		
Si		ICP	10000		
Sn		ICP	500		
Ti		ICP	2000		

Additional Elements:

Element	Prepcode	Analysis	Stock Conc.	Stock Added	Std. No.

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: NB Date: 12-06-12 Time: 1145

Matrix: WATER Block ID: #12 Block Temp: 93°C Thermometer: MP54

ARI Sample ID	Btl #	pH<2	Prep Code: REN Initial ~~Wt (g)~~ Vol (mL)	Prep Code: REN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
VR80R A	1	✓	40.0	20.0			See green sheet
" ADUP	1	✓	↓	↓			↓
" ASPK	1	✓	40.0	20.0			↓
" B	1	✓	50.0	25.0			
" C	1	✓	↓	↓			
" D	1	✓	↓	↓			
" MB1	—	—	↓	↓			
" MB1SPK	—	—	50.0	25.0			
" E	1	—	40.0	20.0			See green sheet
" EDUP	1	—	↓	↓			↓
" ESPK	1	—	40.0	20.0			↓
" F	1	—	50.0	25.0			
" G	1	—	↓	↓			Filtered & preserved in lab.
" H	1	—	↓	↓			↓
" MB2	—	—	↓	↓			↓
" MB2SPK	—	—	50.0	25.0			↓
				NB 12-06-12			

Chemical/Reagent ID: HNO_3: MP2397 MP2342 H_2O_2: I7845 Tube lot #: 1207143

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Corrective Actions
Inorganic Analyses

Criteria Flagged:		ARI Job No.:	VI280
Unacceptable Blank:	✓	Date of Event:	11-27-12
Unacceptable Duplicate:		Client ID:	Anchor
Unacceptable Spike:		Method/Element:	ICPMS-Elan
Unacceptable Reference:		Prep Code:	2EN

Details of Problem/Recommended Corrective Action:

MB1 Cu = 0.710 ppb
MB2 Mn = 0.523 ppb

Mn in E → H detectable but at levels less than lowest contaminated (lowest 2.5 ppb

Cu. A - D around .2 ppb

Samples Affected:

Corrective Action Taken: Redo

A, B, C, D, ASPK, ADUP, MB1, MB1SPK Cu REN

E, F, G, H, ESPK, ICDUP, MB2, MB2SPK Mn REN

12/6/12

Analyst Initials: [signature] **Supervisor:**

Date: 11-28-12 **Date:**

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Metals Laboratory Analyst Notes

ARI Job No.: VR80R

Client ID:

Parameter:

Client Project:

List problems, concerns, corrective actions and any other pertinent information
Samples A, ADUP, ASPK, E, EDUP, ESPK: insufficient sample volume remained for these samples, so these samples prepped at 4/5 the usual initial volume, final volume, spike solution, & reagents.

Analyst Initials:	NB	Date:	12-06-12

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Metals Laboratory
Analyst Notes

ARI Job No.: Various

Client ID:

Parameter: ICPMS

Client Project:

List problems, concerns, corrective actions and any other pertinent information
all internal std's were high in the CV following the initial CRI ICSA ICSAB set. These were all low and in control. The levels in the CV were all in control. The internal std's in the CB immediately following were in control. The run was considered valid and data was accepted

Analyst Initials:		Date:	11-30-12

5048F

Revision 005
6/11/10

Metals Raw Data
Run Logs, Calibrations, and Raw Data

ARI Job ID: VR80

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: 11-12-12 Analysis Date: 11-27-12 Analyst: BA

LR Date: 7-30-12 Page: 1 of 5

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		STD 0			2994-8
		2			-11
		3			-12
		4			-13
		5			-14
		ICV			S: ↑ (NR) 2988-6
		ICB			
		CRI			
		ICSA			
		ICSAB			
		CCV1			S:, T: ↑ (NR)
		~~CCB1~~ BA 11/29/12 VR58 MB1	SWC	2	
		B			
		C			
		D			
		E			Sc/analytes sl. noisy
	✓	ADUP			↓ – Rerun
		A			
		ASPK			Sb↓ (CAF)
		APOST			0.08 mL ICP Spike 2977-9 0.016 mL Sb 1000 2938-7 Sb OK
		MB1SPK			
		CCV2			S:↑ (NR)
		CCB2			
		VR58 F	SWC	2	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: — Analysis Date: 11-27-12 Analyst: BA

LR Date: — Page: 2 of 5

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		VR58 G	SWC	2	
		H	↓	↓	
		I			
		↓ J			
		VR82 A			
		B			
		C			
		D			
		↓ E			
		CCV3			Si ↑ (NR)
		CCB3			
	✓	VR82 F	SWC	2	Failing CCV
	✓	G	↓	↓	↓
	✓	H			
	✓	↓ I			
		CCV4			(Fe), Na, (Sb), Si, Ti ↑
		CCV5			(Fe, Sb), Si, Ti ↑
		CCB4			
		STD4			
		↓ 5			
		CCV6			(Sb↑)
		CCB5			
	✓	VS22 MBi	SWC	2	Failing CCV
	✓	↓ B	↓	5	↓

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: — Analysis Date: 11-27-12 Analyst: BA

LR Date: — Page: 3 of 5

All corrections made by analyst unless otherwise noted. BA 11-28-12

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
	✓	VS22 C	SWC	5	Failing CCV
	✓	D		↓	
	✓	~~ZZZZZZ A L~~		25	
	✓	A		5	
	✓	ADUP			
	✓	ASPK			
	✓	~~ZZZZZZ APOST~~		↓	
	✓	MB1SPK	↓	2	↓
		CCV7			Multiple failures - Noisy (Air bubble?)
		CCV8			↓
		CCV9			
		CCB6			Cu > -RL
		VS22 E	SWC	5	
		F			
		G			
		H			
		I			
		J			
		K			
		L	↓	↓	
		CCV10			
		CCB7			Cu > -RL
		CRI			Cu < 50% (NR)
		ICSA			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: — Analysis Date: 11-27-12 Analyst: BA

LR Date: — Page: 4 of 5

All corrections made by analyst unless otherwise noted. BA 11/29/12

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		ICSAB			
		CCV11			
		CCB8			Cu > -RL
		VS22 MB1	SWC	2	
		B		5	
		C		↓	
		D		↓	
		A-L		25 ✓	
		A		5	
		ADUP		↓ ✓	
		ASPK		↓ ✓	Al Ca Fe Mn STL (CAF) Mg↑
		APOST		↓ ✓	0.08mL ICP Spike 2977-9 Mg ΔK (112%)
		MB1SPK	↓	2	
		CCV12			
		CCB9			Cu > -RL
		CRI			Cu < 50% (NR)
		ICSA			
		ICSAB			
		CCV13			
		CCB10			Cu > -RL End VS22
		VB80 C	TWC		
	✓	VB82 F	SWC	2	
	✓	↓ G	↓	↓	
	✓	↓ H	↓	↓	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: — Analysis Date: 11-27-12 Analyst: BA

LR Date: — Page: 5 of 5

All corrections made by analyst unless otherwise noted. BA 11/29/12

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
	✓	VR82 I	SWC	2	
		CCV14			
		CCB11			Cu > -RL End Pkg
		Rinse/DI			
		BA 11/28/12			

Analysis Begun

Start Time: 11/27/2012 10:20:59 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 11/27/2012 8:08:35 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\CRISET1.sif
Batch ID:
Results Data Set: I2121127
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: Calib Blank 1
Autosampler Location: 1
Date Collected: 11/27/2012 10:21:00 AM
Data Type: Original

Nebulizer Parameters: Calib Blank 1

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2210891.9	17020.28	0.77%	100.0	%
ScR 361.383	274661.2	3538.17	1.29%	100.0	%
Ag 328.068†	-132.5	30.87	23.29%	[0.00]	mg/L
Al 308.215†	191.6	6.20	3.24%	[0.00]	mg/L
As 188.979†	-14.7	0.79	5.36%	[0.00]	mg/L
B 249.677†	27.5	3.60	13.08%	[0.00]	mg/L
Ba 233.527†	27.7	1.73	6.24%	[0.00]	mg/L
Be 313.042†	753.3	15.10	2.00%	[0.00]	mg/L
Ca 317.933†	161.1	11.40	7.08%	[0.00]	mg/L
Cd 228.802†	261.7	1.17	0.45%	[0.00]	mg/L
Co 228.616†	-95.7	6.35	6.64%	[0.00]	mg/L
Cr 267.716†	-131.6	7.01	5.33%	[0.00]	mg/L
Cu 324.752†	2619.1	23.55	0.90%	[0.00]	mg/L
Fe 273.955†	23.7	1.15	4.83%	[0.00]	mg/L
K 766.490†	517.8	21.01	4.06%	[0.00]	mg/L
Mg 279.077†	80.2	5.41	6.75%	[0.00]	mg/L
Mn 257.610†	183.1	5.46	2.98%	[0.00]	mg/L
Mo 202.031†	77.1	2.73	3.54%	[0.00]	mg/L
Na 589.592†	-498.1	32.89	6.60%	[0.00]	mg/L
Na 330.237†	-221.8	2.87	1.30%	[0.00]	mg/L
Ni 231.604†	-19.0	1.35	7.10%	[0.00]	mg/L
Pb 220.353†	57.4	1.77	3.09%	[0.00]	mg/L
Sb 206.836†	82.0	1.13	1.38%	[0.00]	mg/L
Se 196.026†	-45.0	2.79	6.21%	[0.00]	mg/L
Si 288.158†	47.8	7.07	14.81%	[0.00]	mg/L
Sn 189.927†	-6.2	2.03	32.94%	[0.00]	mg/L
Sr 421.552†	351.6	38.50	10.95%	[0.00]	mg/L
Ti 334.903†	-52.7	14.43	27.37%	[0.00]	mg/L
Tl 190.801†	-51.2	4.63	9.04%	[0.00]	mg/L
V 292.402†	132.7	22.87	17.24%	[0.00]	mg/L
Zn 206.200†	14.4	1.60	11.11%	[0.00]	mg/L

Sequence No.: 2
Sample ID: STD2
Autosampler Location: 2
Date Collected: 11/27/2012 10:25:17 AM
Data Type: Original

Nebulizer Parameters: STD2

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: STD2

Analyte	Mean Corrected	Calib

Analyte	Intensity	Std.Dev.	RSD	Conc.	Units
ScA 357.253	2246476.5	28357.27	1.26%	101.6	%
ScR 361.383	274534.5	664.20	0.24%	99.95	%
Ba 233.527†	39545.6	100.19	0.25%	[10]	mg/L
Cd 228.802†	252089.3	4479.02	1.78%	[10]	mg/L
Co 228.616†	334931.3	6078.03	1.81%	[10]	mg/L
Cr 267.716†	55586.1	150.22	0.27%	[10]	mg/L
Cu 324.752†	2199891.5	38521.83	1.75%	[10]	mg/L
Mn 257.610†	327643.6	1337.81	0.41%	[10]	mg/L
V 292.402†	1059176.9	18674.52	1.76%	[10]	mg/L

User canceled analysis.

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Analysis Begun

Start Time: 11/27/2012 10:26:59 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 11/27/2012 8:08:35 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\CRISET1.sif
Batch ID:
Results Data Set: I2121127
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

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Sequence No.: 3
Sample ID: STD3
Autosampler Location: 3
Date Collected: 11/27/2012 10:27:00 AM
Data Type: Original

Nebulizer Parameters: STD3

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: STD3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2238718.3	40678.39	1.82%	101.3	%
ScR 361.383	267043.5	2768.26	1.04%	97.23	%
Ag 328.068†	148866.2	2938.08	1.97%	[1.0]	mg/L
As 188.979†	15575.8	403.92	2.59%	[10]	mg/L
B 249.677†	65443.9	543.47	0.83%	[10]	mg/L
Be 313.042†	2614069.4	15149.67	0.58%	[5.0]	mg/L
Na 589.592†	509275.5	4525.71	0.89%	[50]	mg/L
Ni 231.604†	37081.2	434.73	1.17%	[10]	mg/L
Pb 220.353†	71073.5	1916.74	2.70%	[10]	mg/L
Se 196.026†	12877.7	316.43	2.46%	[10]	mg/L
Sr 421.552†	3648309.3	29671.97	0.81%	[5]	mg/L
Tl 190.801†	21373.1	519.26	2.43%	[10]	mg/L
Zn 206.200†	34265.0	249.32	0.73%	[10]	mg/L

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Sequence No.: 4
Sample ID: STD4
Autosampler Location: 4
Date Collected: 11/27/2012 10:29:17 AM
Data Type: Original

Nebulizer Parameters: STD4

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: STD4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2272399.2	16582.02	0.73%	102.8	%
ScR 361.383	290782.3	2493.68	0.86%	105.9	%
Mo 202.031†	173143.8	2584.66	1.49%	[10]	mg/L
Sb 206.836†	28344.1	396.62	1.40%	[10]	mg/L
Si 288.158†	16571.2	131.99	0.80%	[10]	mg/L
Sn 189.927†	32870.1	483.51	1.47%	[10]	mg/L

Ti 334.903†	165326.6	1707.31	1.03%	[10] mg/L

Sequence No.: 5
Sample ID: STD5

Autosampler Location: 5
Date Collected: 11/27/2012 10:31:32 AM
Data Type: Original

Nebulizer Parameters: STD5

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: STD5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2148512.6	23655.97	1.10%	97.18	%
ScR 361.383	280553.0	1497.02	0.53%	102.1	%
Al 308.215†	40696.6	258.90	0.64%	[30]	mg/L
Ca 317.933†	348837.8	4189.11	1.20%	[30]	mg/L
Fe 273.955†	117603.5	1565.01	1.33%	[100]	mg/L
K 766.490†	169616.5	1349.94	0.80%	[100]	mg/L
Mg 279.077†	34054.7	274.43	0.81%	[30]	mg/L
Na 330.237†	2437.9	21.76	0.89%	[100]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	148900	0.00000	1.000000	
Al 308.215	1	Lin Thru 0	0.0	1357	0.00000	1.000000	
As 188.979	1	Lin Thru 0	0.0	1558	0.00000	1.000000	
B 249.677	1	Lin Thru 0	0.0	6544	0.00000	1.000000	
Ba 233.527	1	Lin Thru 0	0.0	3955	0.00000	1.000000	
Be 313.042	1	Lin Thru 0	0.0	522800	0.00000	1.000000	
Ca 317.933	1	Lin Thru 0	0.0	11630	0.00000	1.000000	
Cd 228.802	1	Lin Thru 0	0.0	25210	0.00000	1.000000	
Co 228.616	1	Lin Thru 0	0.0	33490	0.00000	1.000000	
Cr 267.716	1	Lin Thru 0	0.0	5559	0.00000	1.000000	
Cu 324.752	1	Lin Thru 0	0.0	220000	0.00000	1.000000	
Fe 273.955	1	Lin Thru 0	0.0	1176	0.00000	1.000000	
K 766.490	1	Lin Thru 0	0.0	1696	0.00000	1.000000	
Mg 279.077	1	Lin Thru 0	0.0	1135	0.00000	1.000000	
Mn 257.610	1	Lin Thru 0	0.0	32760	0.00000	1.000000	
Mo 202.031	1	Lin Thru 0	0.0	17310	0.00000	1.000000	
Na 589.592	1	Lin Thru 0	0.0	10190	0.00000	1.000000	
Na 330.237	1	Lin Thru 0	0.0	24.38	0.00000	1.000000	
Ni 231.604	1	Lin Thru 0	0.0	3708	0.00000	1.000000	
Pb 220.353	1	Lin Thru 0	0.0	7107	0.00000	1.000000	
Sb 206.836	1	Lin Thru 0	0.0	2834	0.00000	1.000000	
Se 196.026	1	Lin Thru 0	0.0	1288	0.00000	1.000000	
Si 288.158	1	Lin Thru 0	0.0	1657	0.00000	1.000000	
Sn 189.927	1	Lin Thru 0	0.0	3287	0.00000	1.000000	
Sr 421.552	1	Lin Thru 0	0.0	729700	0.00000	1.000000	
Ti 334.903	1	Lin Thru 0	0.0	16530	0.00000	1.000000	
Tl 190.801	1	Lin Thru 0	0.0	2137	0.00000	1.000000	
V 292.402	1	Lin Thru 0	0.0	105900	0.00000	1.000000	
Zn 206.200	1	Lin Thru 0	0.0	3426	0.00000	1.000000	

Analysis Begun

Start Time: 11/27/2012 10:34:36 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 11/27/2012 8:08:35 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\CRISET1.sif
Batch ID:
Results Data Set: I2121127
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: ICV

Autosampler Location: 7
Date Collected: 11/27/2012 10:34:37 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2251366.5	101.8	%	0.66				0.65%
ScR 361.383	278076.9	101.2	%	0.91				0.90%
Ag 328.068†	156155.1	1.049	mg/L	0.0109	1.049	mg/L	0.0109	1.04%
Al 308.215†	2814.4	2.040	mg/L	0.0200	2.040	mg/L	0.0200	0.98%
As 188.979†	3151.9	2.050	mg/L	0.0127	2.050	mg/L	0.0127	0.62%
B 249.677†	6328.8	0.9662	mg/L	0.00589	0.9662	mg/L	0.00589	0.61%
Ba 233.527†	3967.6	1.003	mg/L	0.0068	1.003	mg/L	0.0068	0.67%
Be 313.042†	503953.3	0.9637	mg/L	0.00344	0.9637	mg/L	0.00344	0.36%
Ca 317.933†	23242.7	1.999	mg/L	0.0109	1.999	mg/L	0.0109	0.54%
Cd 228.802†	26095.2	1.022	mg/L	0.0095	1.022	mg/L	0.0095	0.93%
Co 228.616†	33602.5	1.001	mg/L	0.0104	1.001	mg/L	0.0104	1.04%
Cr 267.716†	5562.7	1.000	mg/L	0.0080	1.000	mg/L	0.0080	0.80%
Cu 324.752†	226700.7	1.030	mg/L	0.0111	1.030	mg/L	0.0111	1.07%
Fe 273.955†	2478.5	2.100	mg/L	0.0131	2.100	mg/L	0.0131	0.63%
K 766.490†	34298.2	20.22	mg/L	0.087	20.22	mg/L	0.087	0.43%
Mg 279.077†	2344.7	2.073	mg/L	0.0050	2.073	mg/L	0.0050	0.24%
Mn 257.610†	31586.7	0.9644	mg/L	0.00725	0.9644	mg/L	0.00725	0.75%
Mo 202.031†	17749.5	1.025	mg/L	0.0117	1.025	mg/L	0.0117	1.14%
Na 589.592†	498399.5	48.93	mg/L	0.096	48.93	mg/L	0.096	0.20%
Na 330.237†	1299.6	53.22	mg/L	0.224	53.22	mg/L	0.224	0.42%
Ni 231.604†	3593.7	0.9695	mg/L	0.00613	0.9695	mg/L	0.00613	0.63%
Pb 220.353†	14049.7	1.978	mg/L	0.0184	1.978	mg/L	0.0184	0.93%
Sb 206.836†	6182.9	2.181	mg/L	0.0127	2.181	mg/L	0.0127	0.58%
Se 196.026†	2576.7	2.000	mg/L	0.0133	2.000	mg/L	0.0133	0.67%
Si 288.158†	3671.0	2.214	mg/L	0.0196	2.214	mg/L	0.0196	0.88%
Sn 189.927†	3408.6	1.038	mg/L	0.0072	1.038	mg/L	0.0072	0.70%
Sr 421.552†	700900.0	0.9606	mg/L	0.00232	0.9606	mg/L	0.00232	0.24%
Ti 334.903†	17890.7	1.081	mg/L	0.0033	1.081	mg/L	0.0033	0.31%
Tl 190.801†	4325.3	2.015	mg/L	0.0139	2.015	mg/L	0.0139	0.69%
V 292.402†	107862.5	1.023	mg/L	0.0104	1.023	mg/L	0.0104	1.01%
Zn 206.200†	3437.2	1.003	mg/L	0.0052	1.003	mg/L	0.0052	0.52%

Sequence No.: 2
Sample ID: ICB

Autosampler Location: 1
Date Collected: 11/27/2012 10:38:39 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2260087.7	102.2	%	0.29				0.29%
ScR 361.383	278429.3	101.4	%	0.97				0.95%
Ag 328.068†	-23.6	-0.00016	mg/L	0.000045	-0.00016	mg/L	0.000045	28.21%
Al 308.215†	-2.8	-0.00210	mg/L	0.004889	-0.00210	mg/L	0.004889	233.25%
As 188.979†	0.1	0.00005	mg/L	0.001034	0.00005	mg/L	0.001034	>999.9%
B 249.677†	18.0	0.00276	mg/L	0.001526	0.00276	mg/L	0.001526	55.34%
Ba 233.527†	-1.0	-0.00025	mg/L	0.000341	-0.00025	mg/L	0.000341	138.72%
Be 313.042†	29.3	0.00006	mg/L	0.000003	0.00006	mg/L	0.000003	6.16%
Ca 317.933†	5.9	0.00050	mg/L	0.001287	0.00050	mg/L	0.001287	255.20%
Cd 228.802†	0.3	0.00001	mg/L	0.000287	0.00001	mg/L	0.000287	>999.9%
Co 228.616†	-1.5	-0.00004	mg/L	0.000078	-0.00004	mg/L	0.000078	175.38%
Cr 267.716†	5.2	0.00093	mg/L	0.001380	0.00093	mg/L	0.001380	148.74%
Cu 324.752†	-23.9	-0.00011	mg/L	0.000030	-0.00011	mg/L	0.000030	27.91%
Fe 273.955†	0.9	0.00077	mg/L	0.003219	0.00077	mg/L	0.003219	419.45%
K 766.490†	-32.9	-0.01938	mg/L	0.007108	-0.01938	mg/L	0.007108	36.67%
Mg 279.077†	-1.2	-0.00109	mg/L	0.002102	-0.00109	mg/L	0.002102	192.69%
Mn 257.610†	7.1	0.00022	mg/L	0.000113	0.00022	mg/L	0.000113	52.14%
Mo 202.031†	28.8	0.00166	mg/L	0.000119	0.00166	mg/L	0.000119	7.13%
Na 589.592†	80.6	0.00791	mg/L	0.003963	0.00791	mg/L	0.003963	50.10%
Na 330.237†	0.3	0.01009	mg/L	0.359633	0.01009	mg/L	0.359633	>999.9%
Ni 231.604†	2.2	0.00059	mg/L	0.000778	0.00059	mg/L	0.000778	132.77%
Pb 220.353†	4.7	0.00067	mg/L	0.000916	0.00067	mg/L	0.000916	136.92%
Sb 206.836†	5.7	0.00201	mg/L	0.000506	0.00201	mg/L	0.000506	25.25%
Se 196.026†	-6.2	-0.00481	mg/L	0.002926	-0.00481	mg/L	0.002926	60.83%
Si 288.158†	0.1	0.00006	mg/L	0.001105	0.00006	mg/L	0.001105	>999.9%
Sn 189.927†	7.4	0.00226	mg/L	0.000268	0.00226	mg/L	0.000268	11.88%
Sr 421.552†	79.8	0.00011	mg/L	0.000028	0.00011	mg/L	0.000028	25.77%
Ti 334.903†	4.2	0.00025	mg/L	0.000642	0.00025	mg/L	0.000642	252.12%
Tl 190.801†	8.2	0.00382	mg/L	0.001099	0.00382	mg/L	0.001099	28.77%
V 292.402†	11.2	0.00011	mg/L	0.000075	0.00011	mg/L	0.000075	68.56%
Zn 206.200†	2.9	0.00085	mg/L	0.000538	0.00085	mg/L	0.000538	63.15%

Sequence No.: 3
Sample ID: CRI

Autosampler Location: 301
Date Collected: 11/27/2012 10:42:54 AM
Data Type: Original

Dilution: 1.00000OX

Nebulizer Parameters: CRI

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: CRI

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2289037.1	103.5	%	0.50				0.48%
ScR 361.383	280700.7	102.2	%	0.14				0.14%
Ag 328.068†	438.4	0.00295	mg/L	0.000082	0.00295	mg/L	0.000082	2.78%
Al 308.215†	68.7	0.05049	mg/L	0.004149	0.05049	mg/L	0.004149	8.22%
As 188.979†	76.8	0.04942	mg/L	0.001997	0.04942	mg/L	0.001997	4.04%
B 249.677†	142.7	0.02180	mg/L	0.000396	0.02180	mg/L	0.000396	1.81%
Ba 233.527†	13.2	0.00333	mg/L	0.000749	0.00333	mg/L	0.000749	22.51%
Be 313.042†	479.2	0.00092	mg/L	0.000055	0.00092	mg/L	0.000055	6.06%
Ca 317.933†	577.4	0.04966	mg/L	0.001477	0.04966	mg/L	0.001477	2.97%
Cd 228.802†	56.5	0.00192	mg/L	0.000036	0.00192	mg/L	0.000036	1.89%
Co 228.616†	110.1	0.00328	mg/L	0.000114	0.00328	mg/L	0.000114	3.48%
Cr 267.716†	29.3	0.00526	mg/L	0.001262	0.00526	mg/L	0.001262	23.97%
Cu 324.752†	358.4	0.00163	mg/L	0.000130	0.00163	mg/L	0.000130	8.00%
Fe 273.955†	61.1	0.05190	mg/L	0.003619	0.05190	mg/L	0.003619	6.97%
K 766.490†	848.3	0.5001	mg/L	0.00475	0.5001	mg/L	0.00475	0.95%
Mg 279.077†	58.2	0.05127	mg/L	0.004770	0.05127	mg/L	0.004770	9.30%
Mn 257.610†	39.5	0.00121	mg/L	0.000059	0.00121	mg/L	0.000059	4.89%
Mo 202.031†	90.9	0.00525	mg/L	0.000413	0.00525	mg/L	0.000413	7.86%
Na 589.592†	4742.8	0.4656	mg/L	0.00136	0.4656	mg/L	0.00136	0.29%
Na 330.237†	16.9	0.6928	mg/L	0.28545	0.6928	mg/L	0.28545	41.20%
Ni 231.604†	41.2	0.01113	mg/L	0.001367	0.01113	mg/L	0.001367	12.28%
Pb 220.353†	146.6	0.02065	mg/L	0.000501	0.02065	mg/L	0.000501	2.43%
Sb 206.836†	149.0	0.05260	mg/L	0.003256	0.05260	mg/L	0.003256	6.19%
Se 196.026†	58.4	0.04534	mg/L	0.000766	0.04534	mg/L	0.000766	1.69%
Si 288.158†	117.2	0.07070	mg/L	0.002833	0.07070	mg/L	0.002833	4.01%
Sn 189.927†	31.7	0.00967	mg/L	0.001261	0.00967	mg/L	0.001261	13.04%
Sr 421.552†	732.8	0.00100	mg/L	0.000041	0.00100	mg/L	0.000041	4.10%
Ti 334.903†	64.9	0.00392	mg/L	0.000668	0.00392	mg/L	0.000668	17.05%
Tl 190.801†	106.5	0.04983	mg/L	0.000736	0.04983	mg/L	0.000736	1.48%
V 292.402†	317.3	0.00302	mg/L	0.000053	0.00302	mg/L	0.000053	1.77%
Zn 206.200†	33.6	0.00982	mg/L	0.000977	0.00982	mg/L	0.000977	9.95%

Sequence No.: 4
Sample ID: ICSA

Autosampler Location: 302
Date Collected: 11/27/2012 10:47:10 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2214904.4	100.2	%	0.19				0.18%
ScR 361.383	268393.2	97.72	%	0.520				0.53%
Ag 328.068†	-176.6	-0.00118	mg/L	0.000448	-0.00118	mg/L	0.000448	37.85%
Al 308.215†	283234.5	208.8	mg/L	0.63	208.8	mg/L	0.63	0.30%
As 188.979†	32.8	0.01508	mg/L	0.001863	0.01508	mg/L	0.001863	12.35%
B 249.677†	-30.9	-0.00472	mg/L	0.001002	-0.00472	mg/L	0.001002	21.21%
Ba 233.527†	118.5	-0.00386	mg/L	0.000588	-0.00386	mg/L	0.000588	15.25%
Be 313.042†	77.1	0.00015	mg/L	0.000025	0.00015	mg/L	0.000025	17.05%
Ca 317.933†	1222697.5	105.2	mg/L	0.92	105.2	mg/L	0.92	0.87%
Cd 228.802†	58.2	0.00020	mg/L	0.000084	0.00020	mg/L	0.000084	41.58%
Co 228.616†	61.1	-0.00088	mg/L	0.000025	-0.00088	mg/L	0.000025	2.81%
Cr 267.716†	8.6	-0.00073	mg/L	0.000487	-0.00073	mg/L	0.000487	67.01%
Cu 324.752†	-1843.8	-0.00017	mg/L	0.000124	-0.00017	mg/L	0.000124	73.64%
Fe 273.955†	242977.5	206.6	mg/L	1.82	206.6	mg/L	1.82	0.88%
K 766.490†	32.3	0.01907	mg/L	0.031428	0.01907	mg/L	0.031428	164.79%
Mg 279.077†	123891.1	109.0	mg/L	0.72	109.0	mg/L	0.72	0.66%
Mn 257.610†	48.7	0.00146	mg/L	0.000289	0.00146	mg/L	0.000289	19.82%
Mo 202.031†	74.9	0.00319	mg/L	0.000617	0.00319	mg/L	0.000617	19.35%
Na 589.592†	122.4	0.01202	mg/L	0.003519	0.01202	mg/L	0.003519	29.28%
Na 330.237†	-10.7	-0.4405	mg/L	0.18901	-0.4405	mg/L	0.18901	42.91%
Ni 231.604†	0.9	0.00026	mg/L	0.001575	0.00026	mg/L	0.001575	611.57%
Pb 220.353†	-299.6	-0.00069	mg/L	0.000569	-0.00069	mg/L	0.000569	82.42%
Sb 206.836†	37.8	0.01315	mg/L	0.001968	0.01315	mg/L	0.001968	14.97%
Se 196.026†	5.9	0.00456	mg/L	0.004295	0.00456	mg/L	0.004295	94.17%
Si 288.158†	-22.3	-0.00024	mg/L	0.008616	-0.00024	mg/L	0.008616	>999.9%
Sn 189.927†	-71.0	-0.00859	mg/L	0.000628	-0.00859	mg/L	0.000628	7.31%
Sr 421.552†	2985.3	0.00409	mg/L Conf.	0.000036	0.00409	mg/L	0.000036	0.89%
Ti 334.903†	100.8	0.00107	mg/L	0.000363	0.00107	mg/L	0.000363	33.84%
Tl 190.801†	-40.1	0.00328	mg/L	0.005340	0.00328	mg/L	0.005340	162.88%
V 292.402†	1165.7	0.00379	mg/L	0.000377	0.00379	mg/L	0.000377	9.94%
Zn 206.200†	10.2	0.00299	mg/L	0.000509	0.00299	mg/L	0.000509	17.03%

Sequence No.: 5
Sample ID: ICSAB

Autosampler Location: 303
Date Collected: 11/27/2012 10:51:26 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2269187.4	102.6	%	0.27				0.26%
ScR 361.383	277546.2	101.1	%	0.36				0.35%
Ag 328.068†	150158.8	1.009	mg/L	0.0034	1.009	mg/L	0.0034	0.34%
Al 308.215†	273761.0	201.8	mg/L	0.47	201.8	mg/L	0.47	0.23%
As 188.979†	1589.0	1.014	mg/L	0.0029	1.014	mg/L	0.0029	0.29%
B 249.677†	-5.7	-0.00286	mg/L	0.000300	-0.00286	mg/L	0.000300	10.48%
Ba 233.527†	4102.8	1.004	mg/L	0.0032	1.004	mg/L	0.0032	0.32%
Be 313.042†	508207.6	0.9719	mg/L	0.00434	0.9719	mg/L	0.00434	0.45%
Ca 317.933†	1203152.6	103.5	mg/L	0.19	103.5	mg/L	0.19	0.19%
Cd 228.802†	25409.9	1.000	mg/L	0.0042	1.000	mg/L	0.0042	0.42%
Co 228.616†	32523.8	0.9682	mg/L	0.00300	0.9682	mg/L	0.00300	0.31%
Cr 267.716†	5619.5	1.009	mg/L	0.0042	1.009	mg/L	0.0042	0.41%
Cu 324.752†	218552.4	1.002	mg/L	0.0021	1.002	mg/L	0.0021	0.21%
Fe 273.955†	238691.7	203.0	mg/L	0.47	203.0	mg/L	0.47	0.23%
K 766.490†	-81.4	-0.04800	mg/L	0.029065	-0.04800	mg/L	0.029065	60.56%
Mg 279.077†	116315.8	102.4	mg/L	0.17	102.4	mg/L	0.17	0.17%
Mn 257.610†	31435.4	0.9596	mg/L	0.00375	0.9596	mg/L	0.00375	0.39%
Mo 202.031†	69.0	0.00281	mg/L	0.000217	0.00281	mg/L	0.000217	7.70%
Na 589.592†	235.6	0.02314	mg/L	0.000818	0.02314	mg/L	0.000818	3.53%
Na 330.237†	8.7	0.04351	mg/L	0.064991	0.04351	mg/L	0.064991	149.36%
Ni 231.604†	3532.5	0.9528	mg/L	0.00296	0.9528	mg/L	0.00296	0.31%
Pb 220.353†	6577.3	0.9660	mg/L	0.00204	0.9660	mg/L	0.00204	0.21%
Sb 206.836†	2948.4	1.029	mg/L	0.0028	1.029	mg/L	0.0028	0.28%
Se 196.026†	1276.5	0.9903	mg/L	0.00398	0.9903	mg/L	0.00398	0.40%
Si 288.158†	-29.5	-0.00180	mg/L	0.000598	-0.00180	mg/L	0.000598	33.24%
Sn 189.927†	-70.0	-0.00800	mg/L	0.000557	-0.00800	mg/L	0.000557	6.96%
Sr 421.552†	2868.5	0.00393	mg/L	Conf. 0.000032	0.00393	mg/L	0.000032	0.81%
Ti 334.903†	96.9	0.00072	mg/L	0.000352	0.00072	mg/L	0.000352	48.87%
Tl 190.801†	1976.5	0.9373	mg/L	0.00340	0.9373	mg/L	0.00340	0.36%
V 292.402†	102131.1	0.9616	mg/L	0.00212	0.9616	mg/L	0.00212	0.22%
Zn 206.200†	3269.1	0.9540	mg/L	0.00501	0.9540	mg/L	0.00501	0.53%

Sequence No.: 6
Sample ID: CV

Autosampler Location: 7
Date Collected: 11/27/2012 10:56:17 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2299680.7	104.0	%	2.52				2.43%
ScR 361.383	274908.6	100.1	%	1.61				1.61%
Ag 328.068†	154294.9	1.037	mg/L	0.0226	1.037	mg/L	0.0226	2.18%
Al 308.215†	2925.6	2.122	mg/L	0.0377	2.122	mg/L	0.0377	1.78%
As 188.979†	3132.4	2.039	mg/L	0.0594	2.039	mg/L	0.0594	2.91%
B 249.677†	6483.3	0.9898	mg/L	0.01467	0.9898	mg/L	0.01467	1.48%
Ba 233.527†	4110.6	1.039	mg/L	0.0176	1.039	mg/L	0.0176	1.70%
Be 313.042†	522277.0	0.9988	mg/L	0.01938	0.9988	mg/L	0.01938	1.94%
Ca 317.933†	24220.0	2.083	mg/L	0.0377	2.083	mg/L	0.0377	1.81%
Cd 228.802†	26005.5	1.019	mg/L	0.0241	1.019	mg/L	0.0241	2.37%
Co 228.616†	33573.2	1.000	mg/L	0.0228	1.000	mg/L	0.0228	2.28%
Cr 267.716†	5749.8	1.034	mg/L	0.0128	1.034	mg/L	0.0128	1.24%
Cu 324.752†	223344.3	1.015	mg/L	0.0229	1.015	mg/L	0.0229	2.26%
Fe 273.955†	2568.7	2.177	mg/L	0.0325	2.177	mg/L	0.0325	1.49%
K 766.490†	35314.0	20.82	mg/L	0.391	20.82	mg/L	0.391	1.88%
Mg 279.077†	2443.7	2.160	mg/L	0.0310	2.160	mg/L	0.0310	1.44%
Mn 257.610†	32650.2	0.9969	mg/L	0.01635	0.9969	mg/L	0.01635	1.64%
Mo 202.031†	17636.2	1.019	mg/L	0.0240	1.019	mg/L	0.0240	2.36%
Na 589.592†	510641.7	50.13	mg/L	0.895	50.13	mg/L	0.895	1.79%
Na 330.237†	1324.3	54.23	mg/L	0.722	54.23	mg/L	0.722	1.33%
Ni 231.604†	3725.2	1.005	mg/L	0.0141	1.005	mg/L	0.0141	1.40%
Pb 220.353†	14089.9	1.984	mg/L	0.0446	1.984	mg/L	0.0446	2.25%
Sb 206.836†	6120.5	2.159	mg/L	0.0594	2.159	mg/L	0.0594	2.75%
Se 196.026†	2556.7	1.984	mg/L	0.0581	1.984	mg/L	0.0581	2.93%
Si 288.158†	3778.6	2.279	mg/L	0.0308	2.279	mg/L	0.0308	1.35%
Sn 189.927†	3391.4	1.033	mg/L	0.0297	1.033	mg/L	0.0297	2.87%
Sr 421.552†	719851.4	0.9866	mg/L	0.01731	0.9866	mg/L	0.01731	1.75%
Ti 334.903†	18421.3	1.113	mg/L	0.0205	1.113	mg/L	0.0205	1.84%
Tl 190.801†	4292.0	2.000	mg/L	0.0530	2.000	mg/L	0.0530	2.65%
V 292.402†	106991.1	1.015	mg/L	0.0230	1.015	mg/L	0.0230	2.26%
Zn 206.200†	3580.3	1.045	mg/L	0.0170	1.045	mg/L	0.0170	1.63%

Sequence No.: 7
Sample ID: CB

Autosampler Location: 1
Date Collected: 11/27/2012 11:01:22 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2270615.9	102.7	%	1.51				1.47%
ScR 361.383	284073.7	103.4	%	1.38				1.33%
Ag 328.068†	-16.4	-0.00011	mg/L	0.000043	-0.00011	mg/L	0.000043	38.82%
Al 308.215†	-10.8	-0.00795	mg/L	0.007651	-0.00795	mg/L	0.007651	96.18%
As 188.979†	1.0	0.00065	mg/L	0.000646	0.00065	mg/L	0.000646	99.68%
B 249.677†	9.1	0.00139	mg/L	0.000498	0.00139	mg/L	0.000498	35.91%
Ba 233.527†	0.1	0.00002	mg/L	0.000425	0.00002	mg/L	0.000425	>999.9%
Be 313.042†	8.3	0.00002	mg/L	0.000038	0.00002	mg/L	0.000038	239.25%
Ca 317.933†	18.6	0.00160	mg/L	0.001037	0.00160	mg/L	0.001037	64.70%
Cd 228.802†	-1.6	-0.00007	mg/L	0.000171	-0.00007	mg/L	0.000171	257.94%
Co 228.616†	-0.3	-0.00001	mg/L	0.000083	-0.00001	mg/L	0.000083	>999.9%
Cr 267.716†	3.2	0.00058	mg/L	0.000250	0.00058	mg/L	0.000250	42.87%
Cu 324.752†	-80.7	-0.00037	mg/L	0.000220	-0.00037	mg/L	0.000220	60.08%
Fe 273.955†	-0.7	-0.00056	mg/L	0.002616	-0.00056	mg/L	0.002616	468.71%
K 766.490†	-40.0	-0.02358	mg/L	0.020779	-0.02358	mg/L	0.020779	88.14%
Mg 279.077†	-0.6	-0.00055	mg/L	0.010402	-0.00055	mg/L	0.010402	>999.9%
Mn 257.610†	-0.1	-0.00000	mg/L	0.000041	-0.00000	mg/L	0.000041	>999.9%
Mo 202.031†	18.2	0.00105	mg/L	0.000217	0.00105	mg/L	0.000217	20.66%
Na 589.592†	69.5	0.00682	mg/L	0.002485	0.00682	mg/L	0.002485	36.42%
Na 330.237†	-0.4	-0.01557	mg/L	0.568685	-0.01557	mg/L	0.568685	>999.9%
Ni 231.604†	0.5	0.00014	mg/L	0.000763	0.00014	mg/L	0.000763	536.13%
Pb 220.353†	4.6	0.00064	mg/L	0.000253	0.00064	mg/L	0.000253	39.37%
Sb 206.836†	5.3	0.00187	mg/L	0.002013	0.00187	mg/L	0.002013	107.60%
Se 196.026†	-5.2	-0.00400	mg/L	0.002013	-0.00400	mg/L	0.002013	50.33%
Si 288.158†	-0.1	-0.00007	mg/L	0.002735	-0.00007	mg/L	0.002735	>999.9%
Sn 189.927†	0.7	0.00020	mg/L	0.000488	0.00020	mg/L	0.000488	244.60%
Sr 421.552†	70.8	0.00010	mg/L	0.000041	0.00010	mg/L	0.000041	42.23%
Ti 334.903†	-8.0	-0.00049	mg/L	0.000596	-0.00049	mg/L	0.000596	122.37%
Tl 190.801†	5.6	0.00261	mg/L	0.000936	0.00261	mg/L	0.000936	35.86%
V 292.402†	10.3	0.00010	mg/L	0.000175	0.00010	mg/L	0.000175	173.67%
Zn 206.200†	-0.9	-0.00026	mg/L	0.000186	-0.00026	mg/L	0.000186	72.22%

Analysis Begun

Start Time: 11/27/2012 11:08:14 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 11/27/2012 8:08:35 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\1127.sif
Batch ID:
Results Data Set: I2121127
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: VR58 MB1 SWC
Autosampler Location: 304
Date Collected: 11/27/2012 11:08:15 AM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: VR58 MB1 SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VR58 MB1 SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2364572.2	107.0	%	0.25				0.24%
ScR 361.383	291062.4	106.0	%	0.46				0.44%
Ag 328.068†	-13.1	-0.00009	mg/L	0.000425	-0.00018	mg/L	0.000850	483.10%
Al 308.215†	4.7	0.00346	mg/L	0.002560	0.00691	mg/L	0.005120	74.04%
As 188.979†	1.8	0.00118	mg/L	0.001372	0.00237	mg/L	0.002744	115.82%
B 249.677†	-1.1	-0.00017	mg/L	0.000605	-0.00034	mg/L	0.001210	356.54%
Ba 233.527†	-2.4	-0.00061	mg/L	0.000422	-0.00122	mg/L	0.000843	69.08%
Be 313.042†	-25.7	-0.00005	mg/L	0.000026	-0.00010	mg/L	0.000053	53.82%
Ca 317.933†	148.5	0.01277	mg/L	0.000822	0.02555	mg/L	0.001645	6.44%
Cd 228.802†	-2.5	-0.00011	mg/L	0.000177	-0.00021	mg/L	0.000354	166.52%
Co 228.616†	12.6	0.00038	mg/L	0.000062	0.00075	mg/L	0.000124	16.53%
Cr 267.716†	8.3	0.00149	mg/L	0.000626	0.00298	mg/L	0.001252	42.03%
Cu 324.752†	-152.1	-0.00069	mg/L	0.000050	-0.00138	mg/L	0.000100	7.23%
Fe 273.955†	13.1	0.01116	mg/L	0.000956	0.02231	mg/L	0.001912	8.57%
K 766.490†	-25.7	-0.01513	mg/L	0.004231	-0.03027	mg/L	0.008463	27.96%
Mg 279.077†	2.2	0.00193	mg/L	0.004171	0.00387	mg/L	0.008342	215.63%
Mn 257.610†	-1.0	-0.00003	mg/L	0.000101	-0.00006	mg/L	0.000202	320.30%
Mo 202.031†	-2.2	-0.00013	mg/L	0.000162	-0.00026	mg/L	0.000323	126.37%
Na 589.592†	-0.5	-0.00005	mg/L	0.004882	-0.00009	mg/L	0.009765	>999.9%
Na 330.237†	-3.4	-0.1388	mg/L	0.35783	-0.2777	mg/L	0.71567	257.75%
Ni 231.604†	6.0	0.00161	mg/L	0.001505	0.00321	mg/L	0.003010	93.66%
Pb 220.353†	0.9	0.00013	mg/L	0.000207	0.00026	mg/L	0.000413	158.16%
Sb 206.836†	-3.4	-0.00122	mg/L	0.001137	-0.00244	mg/L	0.002273	93.08%
Se 196.026†	-5.5	-0.00426	mg/L	0.001809	-0.00851	mg/L	0.003619	42.52%
Si 288.158†	4.1	0.00246	mg/L	0.004676	0.00492	mg/L	0.009351	189.99%
Sn 189.927†	-1.1	-0.00034	mg/L	0.001056	-0.00068	mg/L	0.002111	310.32%
Sr 421.552†	43.1	0.00006	mg/L	0.000041	0.00012	mg/L	0.000082	69.17%
Ti 334.903†	0.1	0.00001	mg/L	0.001690	0.00002	mg/L	0.003379	>999.9%
Tl 190.801†	8.6	0.00403	mg/L	0.001718	0.00805	mg/L	0.003436	42.67%
V 292.402†	-9.1	-0.00008	mg/L	0.000061	-0.00016	mg/L	0.000122	76.14%
Zn 206.200†	11.0	0.00321	mg/L	0.000473	0.00642	mg/L	0.000947	14.75%

Sequence No.: 2
Sample ID: VR58 B SWC

Autosampler Location: 305
Date Collected: 11/27/2012 11:12:31 AM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: VR58 B SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR58 B SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2371794.2	107.3	%	1.59				1.48%
ScR 361.383	292162.9	106.4	%	0.17				0.16%
Ag 328.068†	-33.2	-0.00020	mg/L	0.000348	-0.00039	mg/L	0.000697	177.82%
Al 308.215†	38501.1	28.38	mg/L	0.232	56.75	mg/L	0.463	0.82%
As 188.979†	-41.0	0.02805	mg/L	0.001322	0.05610	mg/L	0.002644	4.71%
B 249.677†	69.6	0.01059	mg/L	0.001002	0.02118	mg/L	0.002004	9.46%
Ba 233.527†	1087.0	0.2653	mg/L	0.00189	0.5307	mg/L	0.00377	0.71%
Be 313.042†	261.0	0.00046	mg/L	0.000016	0.00091	mg/L	0.000032	3.52%
Ca 317.933†	163912.2	14.10	mg/L	0.142	28.19	mg/L	0.284	1.01%
Cd 228.802†	44.8	0.00147	mg/L	0.000098	0.00294	mg/L	0.000195	6.65%
Co 228.616†	792.8	0.01914	mg/L	0.000319	0.03829	mg/L	0.000638	1.67%
Cr 267.716†	473.7	0.08632	mg/L	0.000353	0.1726	mg/L	0.00071	0.41%
Cu 324.752†	35045.3	0.1614	mg/L	0.00345	0.3228	mg/L	0.00689	2.14%
Fe 273.955†	68343.6	58.11	mg/L	0.498	116.2	mg/L	1.00	0.86%
K 766.490†	2703.6	1.594	mg/L	0.0141	3.188	mg/L	0.0282	0.89%
Mg 279.077†	10661.1	9.361	mg/L	0.0023	18.72	mg/L	0.005	0.02%
Mn 257.610†	65923.7	2.012	mg/L	0.0151	4.025	mg/L	0.0303	0.75%
Mo 202.031†	37.9	0.00203	mg/L	0.000192	0.00406	mg/L	0.000385	9.47%
Na 589.592†	7262.5	0.7130	mg/L	0.00281	1.426	mg/L	0.0056	0.39%
Na 330.237†	21.2	1.104	mg/L	0.0892	2.209	mg/L	0.1784	8.08%
Ni 231.604†	289.4	0.07804	mg/L	0.001013	0.1561	mg/L	0.00203	1.30%
Pb 220.353†	556.1	0.08258	mg/L	0.002012	0.1652	mg/L	0.00402	2.44%
Sb 206.836†	7.4	0.00256	mg/L	0.000887	0.00513	mg/L	0.001775	34.63%
Se 196.026†	-4.0	-0.00316	mg/L	0.001921	-0.00632	mg/L	0.003841	60.80%
Si 288.158†	6866.3	4.145	mg/L	0.0035	8.289	mg/L	0.0070	0.08%
Sn 189.927†	-8.8	-0.00064	mg/L	0.001249	-0.00128	mg/L	0.002498	195.93%
Sr 421.552†	60774.8	0.08329	mg/L	0.000553	0.1666	mg/L	0.00111	0.66%
Ti 334.903†	31959.5	1.932	mg/L	0.0159	3.865	mg/L	0.0318	0.82%
Tl 190.801†	-1.4	0.00507	mg/L	0.001605	0.01014	mg/L	0.003211	31.65%
V 292.402†	9904.3	0.09106	mg/L	0.002079	0.1821	mg/L	0.00416	2.28%
Zn 206.200†	2140.6	0.6247	mg/L	0.00276	1.249	mg/L	0.0055	0.44%

Sequence No.: 3
Sample ID: VR58 C SWC

Autosampler Location: 306
Date Collected: 11/27/2012 11:16:30 AM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: VR58 C SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VR58 C SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2336500.1	105.7	%	1.23				1.17%
ScR 361.383	290898.9	105.9	%	1.38				1.30%
Ag 328.068†	-47.0	-0.00028	mg/L	0.000240	-0.00055	mg/L	0.000480	87.12%
Al 308.215†	56814.9	41.87	mg/L	0.211	83.75	mg/L	0.422	0.50%
As 188.979†	-105.9	0.02234	mg/L	0.002643	0.04467	mg/L	0.005286	11.83%
B 249.677†	74.5	0.01132	mg/L	0.000637	0.02264	mg/L	0.001274	5.63%
Ba 233.527†	1371.3	0.3367	mg/L	0.00344	0.6735	mg/L	0.00687	1.02%
Be 313.042†	345.8	0.00060	mg/L	0.000053	0.00119	mg/L	0.000107	8.99%
Ca 317.933†	210849.0	18.13	mg/L	0.062	36.27	mg/L	0.124	0.34%
Cd 228.802†	50.6	0.00198	mg/L	0.000190	0.00395	mg/L	0.000379	9.60%
Co 228.616†	1128.0	0.02666	mg/L	0.000527	0.05331	mg/L	0.001053	1.98%
Cr 267.716†	668.7	0.1210	mg/L	0.00125	0.2420	mg/L	0.00251	1.04%
Cu 324.752†	28657.3	0.1322	mg/L	0.00231	0.2644	mg/L	0.00462	1.75%
Fe 273.955†	71690.7	60.96	mg/L	0.259	121.9	mg/L	0.52	0.43%
K 766.490†	3803.7	2.243	mg/L	0.0261	4.485	mg/L	0.0522	1.16%
Mg 279.077†	17300.8	15.21	mg/L	0.119	30.42	mg/L	0.238	0.78%
Mn 257.610†	53082.1	1.620	mg/L	0.0058	3.241	mg/L	0.0117	0.36%
Mo 202.031†	46.2	0.00247	mg/L	0.000094	0.00494	mg/L	0.000189	3.82%
Na 589.592†	11372.0	1.116	mg/L	0.0019	2.233	mg/L	0.0037	0.17%
Na 330.237†	25.3	1.595	mg/L	0.1317	3.190	mg/L	0.2634	8.26%
Ni 231.604†	418.4	0.1128	mg/L	0.00263	0.2257	mg/L	0.00526	2.33%
Pb 220.353†	478.2	0.07484	mg/L	0.001191	0.1497	mg/L	0.00238	1.59%
Sb 206.836†	4.2	0.00165	mg/L	0.001646	0.00330	mg/L	0.003292	99.76%
Se 196.026†	-2.3	-0.00187	mg/L	0.004824	-0.00375	mg/L	0.009649	257.46%
Si 288.158†	8807.6	5.317	mg/L	0.0442	10.63	mg/L	0.088	0.83%
Sn 189.927†	-15.7	-0.00208	mg/L	0.001348	-0.00416	mg/L	0.002696	64.86%
Sr 421.552†	81164.1	0.1112	mg/L	0.00053	0.2225	mg/L	0.00107	0.48%
Ti 334.903†	52886.3	3.198	mg/L	0.0107	6.396	mg/L	0.0215	0.34%
Tl 190.801†	0.2	0.00592	mg/L	0.002003	0.01183	mg/L	0.004005	33.85%
V 292.402†	14679.7	0.1354	mg/L	0.00202	0.2709	mg/L	0.00403	1.49%
Zn 206.200†	1766.1	0.5154	mg/L	0.00517	1.031	mg/L	0.0103	1.00%

Sequence No.: 4
Sample ID: VR58 D SWC

Autosampler Location: 307
Date Collected: 11/27/2012 11:20:29 AM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: VR58 D SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR58 D SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2326400.3	105.2	%	0.35				0.33%
ScR 361.383	288893.9	105.2	%	0.37				0.35%
Ag 328.068†	-32.3	-0.00018	mg/L	0.000112	-0.00036	mg/L	0.000223	61.79%
Al 308.215†	56902.7	41.94	mg/L	0.046	83.88	mg/L	0.093	0.11%
As 188.979†	-83.7	0.01768	mg/L	0.002546	0.03537	mg/L	0.005093	14.40%
B 249.677†	65.5	0.00995	mg/L	0.000634	0.01991	mg/L	0.001267	6.36%
Ba 233.527†	1267.1	0.3094	mg/L	0.00347	0.6188	mg/L	0.00693	1.12%
Be 313.042†	350.4	0.00061	mg/L	0.000046	0.00123	mg/L	0.000091	7.41%
Ca 317.933†	165971.2	14.27	mg/L	0.091	28.55	mg/L	0.182	0.64%
Cd 228.802†	53.4	0.00193	mg/L	0.000157	0.00385	mg/L	0.000314	8.15%
Co 228.616†	985.8	0.02363	mg/L	0.000079	0.04727	mg/L	0.000159	0.34%
Cr 267.716†	651.6	0.1183	mg/L	0.00098	0.2365	mg/L	0.00195	0.83%
Cu 324.752†	29430.9	0.1361	mg/L	0.00048	0.2722	mg/L	0.00096	0.35%
Fe 273.955†	78694.5	66.91	mg/L	0.417	133.8	mg/L	0.83	0.62%
K 766.490†	3831.3	2.259	mg/L	0.0194	4.518	mg/L	0.0389	0.86%
Mg 279.077†	16380.7	14.39	mg/L	0.119	28.79	mg/L	0.237	0.82%
Mn 257.610†	60876.8	1.858	mg/L	0.0104	3.716	mg/L	0.0207	0.56%
Mo 202.031†	41.0	0.00221	mg/L	0.000177	0.00441	mg/L	0.000354	8.02%
Na 589.592†	8490.6	0.8336	mg/L	0.00831	1.667	mg/L	0.0166	1.00%
Na 330.237†	13.8	0.9952	mg/L	0.17083	1.990	mg/L	0.3417	17.16%
Ni 231.604†	372.0	0.1003	mg/L	0.00161	0.2007	mg/L	0.00322	1.60%
Pb 220.353†	440.0	0.06922	mg/L	0.000961	0.1384	mg/L	0.00192	1.39%
Sb 206.836†	7.1	0.00237	mg/L	0.001049	0.00474	mg/L	0.002099	44.24%
Se 196.026†	-0.2	-0.00024	mg/L	0.002060	-0.00047	mg/L	0.004120	873.17%
Si 288.158†	11161.2	6.737	mg/L	0.0427	13.47	mg/L	0.085	0.63%
Sn 189.927†	-12.0	-0.00151	mg/L	0.000782	-0.00301	mg/L	0.001564	51.97%
Sr 421.552†	68501.4	0.09388	mg/L	0.000244	0.1878	mg/L	0.00049	0.26%
Ti 334.903†	41812.9	2.528	mg/L	0.0094	5.057	mg/L	0.0189	0.37%
Tl 190.801†	-11.4	0.00119	mg/L	0.003981	0.00239	mg/L	0.007962	333.26%
V 292.402†	13332.1	0.1229	mg/L	0.00024	0.2458	mg/L	0.00048	0.20%
Zn 206.200†	1541.3	0.4498	mg/L	0.00325	0.8996	mg/L	0.00650	0.72%

Sequence No.: 5
Sample ID: VR58 E SWC

Dilution: 2.000000X

Autosampler Location: 308
Date Collected: 11/27/2012 11:24:28 AM
Data Type: Original

Nebulizer Parameters: VR58 E SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VR58 E SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2306648.5	104.3	%	0.61				0.59%
ScR 361.383	290390.1	105.7	%	3.66				3.46%
Ag 328.068†	-28.3	-0.00015	mg/L	0.000213	-0.00030	mg/L	0.000425	139.53%
Al 308.215†	59497.2	43.85	mg/L	1.801	87.70	mg/L	3.601	4.11%
As 188.979†	-89.5	0.01882	mg/L	0.002622	0.03764	mg/L	0.005244	13.93%
B 249.677†	81.9	0.01245	mg/L	0.001137	0.02490	mg/L	0.002274	9.13%
Ba 233.527†	1303.9	0.3186	mg/L	0.01137	0.6373	mg/L	0.02273	3.57%
Be 313.042†	362.2	0.00063	mg/L	0.000098	0.00127	mg/L	0.000196	15.48%
Ca 317.933†	173666.6	14.94	mg/L	0.577	29.87	mg/L	1.154	3.86%
Cd 228.802†	54.2	0.00197	mg/L	0.000034	0.00395	mg/L	0.000069	1.74%
Co 228.616†	1012.6	0.02409	mg/L	0.000409	0.04819	mg/L	0.000819	1.70%
Cr 267.716†	670.1	0.1216	mg/L	0.00449	0.2433	mg/L	0.00898	3.69%
Cu 324.752†	29990.5	0.1386	mg/L	0.00046	0.2773	mg/L	0.00092	0.33%
Fe 273.955†	79351.9	67.47	mg/L	2.554	134.9	mg/L	5.11	3.78%
K 766.490†	4121.1	2.430	mg/L	0.1024	4.859	mg/L	0.2047	4.21%
Mg 279.077†	15845.5	13.92	mg/L	0.546	27.85	mg/L	1.091	3.92%
Mn 257.610†	61340.8	1.872	mg/L	0.0713	3.745	mg/L	0.1425	3.81%
Mo 202.031†	45.8	0.00248	mg/L	0.000300	0.00495	mg/L	0.000599	12.10%
Na 589.592†	9327.6	0.9158	mg/L	0.03281	1.832	mg/L	0.0656	3.58%
Na 330.237†	17.9	1.200	mg/L	0.3066	2.399	mg/L	0.6132	25.56%
Ni 231.604†	372.0	0.1003	mg/L	0.00450	0.2006	mg/L	0.00899	4.48%
Pb 220.353†	446.8	0.07062	mg/L	0.001687	0.1412	mg/L	0.00337	2.39%
Sb 206.836†	5.7	0.00192	mg/L	0.001503	0.00385	mg/L	0.003006	78.12%
Se 196.026†	3.3	0.00249	mg/L	0.001388	0.00497	mg/L	0.002775	55.84%
Si 288.158†	9269.6	5.596	mg/L	0.1846	11.19	mg/L	0.369	3.30%
Sn 189.927†	-16.0	-0.00263	mg/L	0.001097	-0.00527	mg/L	0.002193	41.62%
Sr 421.552†	72105.6	0.09882	mg/L	0.003935	0.1976	mg/L	0.00787	3.98%
Ti 334.903†	44663.1	2.701	mg/L	0.1040	5.402	mg/L	0.2080	3.85%
Tl 190.801†	-9.4	0.00216	mg/L	0.000897	0.00432	mg/L	0.001795	41.57%
V 292.402†	13928.9	0.1284	mg/L	0.00055	0.2569	mg/L	0.00110	0.43%
Zn 206.200†	1550.1	0.4524	mg/L	0.01653	0.9048	mg/L	0.03306	3.65%

Sequence No.: 6
Sample ID: VR58 ADUP SWC

Dilution: 2.000000X

Del

Autosampler Location: 309
Date Collected: 11/27/2012 11:28:27 AM
Data Type: Original

Nebulizer Parameters: VR58 ADUP SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR58 ADUP SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2344993.8	106.1	%	0.34				0.32%
ScR 361.383	290103.9	105.6	%	3.92				3.71%
Ag 328.068†	2.3	0.00007	mg/L	0.000375	0.00015	mg/L	0.000750	515.22%
Al 308.215†	79478.6	58.58	mg/L	2.760	117.2	mg/L	5.52	4.71%
As 188.979†	265.0	0.3010	mg/L	0.00444	0.6019	mg/L	0.00888	1.48%
B 249.677†	94.3	0.01433	mg/L	0.000732	0.02866	mg/L	0.001464	5.11%
Ba 233.527†	1459.5	0.3533	mg/L	0.01326	0.7067	mg/L	0.02652	3.75%
Be 313.042†	531.4	0.00092	mg/L	0.000084	0.00184	mg/L	0.000167	9.08%
Ca 317.933†	317647.7	27.32	mg/L	1.332	54.64	mg/L	2.664	4.88%
Cd 228.802†	97.1	0.00198	mg/L	0.000245	0.00395	mg/L	0.000490	12.41%
Co 228.616†	1828.0	0.04432	mg/L	0.000807	0.08863	mg/L	0.001614	1.82%
Cr 267.716†	1044.4	0.1886	mg/L	0.00609	0.3772	mg/L	0.01219	3.23%
Cu 324.752†	51501.8	0.2371	mg/L	0.00082	0.4743	mg/L	0.00164	0.35%
Fe 273.955†	112565.3	95.71	mg/L	4.890	191.4	mg/L	9.78	5.11%
K 766.490†	5886.3	3.470	mg/L	0.1723	6.941	mg/L	0.3446	4.96%
Mg 279.077†	32998.0	29.02	mg/L	1.055	58.04	mg/L	2.109	3.63%
Mn 257.610†	59876.4	1.828	mg/L	0.0901	3.656	mg/L	0.1802	4.93%
Mo 202.031†	455.7	0.02601	mg/L	0.000172	0.05203	mg/L	0.000344	0.66%
Na 589.592†	19187.8	1.884	mg/L	0.0887	3.768	mg/L	0.1774	4.71%
Na 330.237†	37.3	2.139	mg/L	0.4997	4.279	mg/L	0.9993	23.35%
Ni 231.604†	710.7	0.1917	mg/L	0.00678	0.3835	mg/L	0.01355	3.53%
Pb 220.353†	2479.4	0.3590	mg/L	0.00150	0.7179	mg/L	0.00301	0.42%
Sb 206.836†	320.4	0.1134	mg/L	0.00142	0.2268	mg/L	0.00284	1.25%
Se 196.026†	-1.6	-0.00141	mg/L	0.003584	-0.00281	mg/L	0.007167	254.79%
Si 288.158†	9404.2	5.678	mg/L	0.2019	11.36	mg/L	0.404	3.55%
Sn 189.927†	84.2	0.02972	mg/L	0.000901	0.05945	mg/L	0.001801	3.03%
Sr 421.552†	109514.4	0.1501	mg/L	0.00710	0.3002	mg/L	0.01421	4.73%
Ti 334.903†	76645.6	4.635	mg/L	0.2158	9.269	mg/L	0.4316	4.66%
Tl 190.801†	-11.6	0.00376	mg/L	0.000748	0.00753	mg/L	0.001497	19.88%
V 292.402†	21123.1	0.1946	mg/L	0.00089	0.3891	mg/L	0.00179	0.46%
Zn 206.200†	4626.6	1.350	mg/L	0.0486	2.700	mg/L	0.0972	3.60%

Sequence No.: 7
Sample ID: VR58 A SWC

Autosampler Location: 310
Date Collected: 11/27/2012 11:32:26 AM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: VR58 A SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VR58 A SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2338771.8	105.8	%	0.58				0.55%
ScR 361.383	289664.8	105.5	%	2.87				2.72%
Ag 328.068†	-37.1	-0.00019	mg/L	0.000050	-0.00038	mg/L	0.000100	26.52%
Al 308.215†	83416.3	61.48	mg/L	2.174	123.0	mg/L	4.35	3.54%
As 188.979†	-213.0	0.00894	mg/L	0.003667	0.01789	mg/L	0.007334	41.01%
B 249.677†	82.3	0.01246	mg/L	0.000617	0.02492	mg/L	0.001234	4.95%
Ba 233.527†	1308.4	0.3155	mg/L	0.00941	0.6310	mg/L	0.01882	2.98%
Be 313.042†	549.1	0.00095	mg/L	0.000076	0.00189	mg/L	0.000152	8.02%
Ca 317.933†	364561.9	31.35	mg/L	1.199	62.70	mg/L	2.399	3.83%
Cd 228.802†	54.0	0.00233	mg/L	0.000120	0.00467	mg/L	0.000240	5.15%
Co 228.616†	1836.7	0.04359	mg/L	0.000580	0.08718	mg/L	0.001160	1.33%
Cr 267.716†	967.1	0.1746	mg/L	0.00382	0.3491	mg/L	0.00763	2.19%
Cu 324.752†	23602.4	0.1101	mg/L	0.00032	0.2202	mg/L	0.00065	0.29%
Fe 273.955†	109677.3	93.26	mg/L	3.435	186.5	mg/L	6.87	3.68%
K 766.490†	5119.5	3.018	mg/L	0.1238	6.037	mg/L	0.2475	4.10%
Mg 279.077†	33295.5	29.28	mg/L	0.802	58.56	mg/L	1.603	2.74%
Mn 257.610†	59547.4	1.818	mg/L	0.0679	3.635	mg/L	0.1358	3.73%
Mo 202.031†	59.8	0.00310	mg/L	0.000167	0.00621	mg/L	0.000333	5.37%
Na 589.592†	13872.0	1.362	mg/L	0.0476	2.724	mg/L	0.0952	3.49%
Na 330.237†	18.1	1.729	mg/L	0.3032	3.458	mg/L	0.6063	17.53%
Ni 231.604†	725.4	0.1956	mg/L	0.00590	0.3912	mg/L	0.01180	3.02%
Pb 220.353†	710.2	0.1110	mg/L	0.00088	0.2220	mg/L	0.00175	0.79%
Sb 206.836†	7.9	0.00326	mg/L	0.001576	0.00653	mg/L	0.003153	48.29%
Se 196.026†	-1.7	-0.00148	mg/L	0.003109	-0.00295	mg/L	0.006217	210.45%
Si 288.158†	11039.3	6.665	mg/L	0.1750	13.33	mg/L	0.350	2.63%
Sn 189.927†	-30.0	-0.00450	mg/L	0.000892	-0.00899	mg/L	0.001785	19.85%
Sr 421.552†	100961.0	0.1384	mg/L	0.00487	0.2767	mg/L	0.00975	3.52%
Ti 334.903†	85328.5	5.160	mg/L	0.1868	10.32	mg/L	0.374	3.62%
Tl 190.801†	-9.3	0.00456	mg/L	0.001525	0.00911	mg/L	0.003049	33.46%
V 292.402†	21982.9	0.2024	mg/L	0.00035	0.4048	mg/L	0.00069	0.17%
Zn 206.200†	1950.8	0.5693	mg/L	0.01568	1.139	mg/L	0.0314	2.76%

Sequence No.: 8
Sample ID: VR58 ASPK SWC

Autosampler Location: 311
Date Collected: 11/27/2012 11:36:25 AM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: VR58 ASPK SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR58 ASPK SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2364661.1	107.0	%	0.76				0.71%
ScR 361.383	293652.3	106.9	%	0.58				0.54%
Ag 328.068†	73160.9	0.4916	mg/L	0.00481	0.9833	mg/L	0.00962	0.98%
Al 308.215†	78539.8	57.88	mg/L	0.074	115.8	mg/L	0.15	0.13%
As 188.979†	2944.3	2.004	mg/L	0.0226	4.008	mg/L	0.0452	1.13%
B 249.677†	92.7	0.01306	mg/L	0.001221	0.02611	mg/L	0.002442	9.35%
Ba 233.527†	8980.7	2.257	mg/L	0.0181	4.514	mg/L	0.0363	0.80%
Be 313.042†	254187.8	0.4860	mg/L	0.00062	0.9720	mg/L	0.00123	0.13%
Ca 317.933†	581459.3	50.01	mg/L	0.046	100.0	mg/L	0.09	0.09%
Cd 228.802†	13425.9	0.5197	mg/L	0.00453	1.039	mg/L	0.0091	0.87%
Co 228.616†	18091.7	0.5309	mg/L	0.00510	1.062	mg/L	0.0102	0.96%
Cr 267.716†	3559.7	0.6396	mg/L	0.00830	1.279	mg/L	0.0166	1.30%
Cu 324.752†	131806.0	0.6018	mg/L	0.00506	1.204	mg/L	0.0101	0.84%
Fe 273.955†	100221.2	85.21	mg/L	0.088	170.4	mg/L	0.18	0.10%
K 766.490†	21207.4	12.50	mg/L	0.021	25.01	mg/L	0.042	0.17%
Mg 279.077†	42717.0	37.59	mg/L	0.274	75.17	mg/L	0.547	0.73%
Mn 257.610†	71393.4	2.180	mg/L	0.0012	4.359	mg/L	0.0025	0.06%
Mo 202.031†	78.1	0.00394	mg/L	0.000338	0.00787	mg/L	0.000676	8.59%
Na 589.592†	112266.0	11.02	mg/L	0.008	22.04	mg/L	0.017	0.08%
Na 330.237†	281.9	12.15	mg/L	0.490	24.29	mg/L	0.979	4.03%
Ni 231.604†	2395.6	0.6456	mg/L	0.00279	1.291	mg/L	0.0056	0.43%
Pb 220.353†	14410.8	2.038	mg/L	0.0200	4.077	mg/L	0.0400	0.98%
Sb 206.836†	2184.6	0.7658	mg/L	0.00899	1.532	mg/L	0.0180	1.17%
Se 196.026†	2578.9	2.002	mg/L	0.0198	4.004	mg/L	0.0396	0.99%
Si 288.158†	9544.1	5.766	mg/L	0.0409	11.53	mg/L	0.082	0.71%
Sn 189.927†	-37.7	-0.00429	mg/L	0.000852	-0.00858	mg/L	0.001705	19.87%
Sr 421.552†	467519.7	0.6407	mg/L	0.00041	1.281	mg/L	0.0008	0.06%
Ti 334.903†	67554.4	4.084	mg/L	0.0005	8.167	mg/L	0.0009	0.01%
Tl 190.801†	4066.7	1.906	mg/L	0.0155	3.813	mg/L	0.0311	0.81%
V 292.402†	69412.5	0.6531	mg/L	0.00706	1.306	mg/L	0.0141	1.08%
Zn 206.200†	3591.4	1.048	mg/L	0.0052	2.096	mg/L	0.0105	0.50%

Sequence No.: 9
Sample ID: VR58 APOST SWC

Dilution: 2.000000X

Autosampler Location: 312
Date Collected: 11/27/2012 11:39:26 AM
Data Type: Original

Nebulizer Parameters: VR58 APOST SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VR58 APOST SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2353764.4	106.5	%	0.31				0.29%
ScR 361.383	292669.3	106.6	%	0.61				0.57%
Ag 328.068†	69545.6	0.4674	mg/L	0.00134	0.9347	mg/L	0.00268	0.29%
Al 308.215†	85401.1	62.93	mg/L	0.098	125.9	mg/L	0.20	0.16%
As 188.979†	2847.6	1.972	mg/L	0.0019	3.943	mg/L	0.0039	0.10%
B 249.677†	84.8	0.01185	mg/L	0.001767	0.02369	mg/L	0.003533	14.91%
Ba 233.527†	8923.9	2.241	mg/L	0.0123	4.482	mg/L	0.0247	0.55%
Be 313.042†	250172.4	0.4783	mg/L	0.00068	0.9566	mg/L	0.00137	0.14%
Ca 317.933†	479128.8	41.21	mg/L	0.036	82.41	mg/L	0.072	0.09%
Cd 228.802†	13255.1	0.5133	mg/L	0.00100	1.027	mg/L	0.0020	0.20%
Co 228.616†	18220.3	0.5326	mg/L	0.00068	1.065	mg/L	0.0014	0.13%
Cr 267.716†	3621.3	0.6510	mg/L	0.00317	1.302	mg/L	0.0063	0.49%
Cu 324.752†	130974.9	0.5982	mg/L	0.00090	1.196	mg/L	0.0018	0.15%
Fe 273.955†	110706.8	94.13	mg/L	0.185	188.3	mg/L	0.37	0.20%
K 766.490†	21833.2	12.87	mg/L	0.014	25.74	mg/L	0.028	0.11%
Mg 279.077†	44307.1	38.98	mg/L	0.243	77.97	mg/L	0.487	0.62%
Mn 257.610†	74382.4	2.271	mg/L	0.0038	4.542	mg/L	0.0077	0.17%
Mo 202.031†	72.8	0.00373	mg/L	0.000060	0.00745	mg/L	0.000119	1.60%
Na 589.592†	109121.8	10.71	mg/L	0.021	21.43	mg/L	0.042	0.20%
Na 330.237†	261.8	11.56	mg/L	0.429	23.13	mg/L	0.858	3.71%
Ni 231.604†	2401.7	0.6481	mg/L	0.00236	1.296	mg/L	0.0047	0.36%
Pb 220.353†	14359.1	2.032	mg/L	0.0021	4.064	mg/L	0.0041	0.10%
Sb 206.836†	6175.3	2.174	mg/L	0.0038	4.348	mg/L	0.0077	0.18%
Se 196.026†	2555.7	1.984	mg/L	0.0052	3.968	mg/L	0.0105	0.26%
Si 288.158†	10860.9	6.561	mg/L	0.0646	13.12	mg/L	0.129	0.98%
Sn 189.927†	-44.7	-0.00671	mg/L	0.001415	-0.01343	mg/L	0.002829	21.07%
Sr 421.552†	445173.2	0.6101	mg/L	0.00115	1.220	mg/L	0.0023	0.19%
Ti 334.903†	84553.3	5.112	mg/L	0.0135	10.22	mg/L	0.027	0.26%
Tl 190.801†	4037.7	1.894	mg/L	0.0030	3.787	mg/L	0.0060	0.16%
V 292.402†	71094.5	0.6682	mg/L	0.00052	1.336	mg/L	0.0010	0.08%
Zn 206.200†	3501.5	1.022	mg/L	0.0082	2.044	mg/L	0.0163	0.80%

Sequence No.: 10
Sample ID: VR58 MB1SPK SWC

Dilution: 2.000000X

Autosampler Location: 313
Date Collected: 11/27/2012 11:42:27 AM
Data Type: Original

Nebulizer Parameters: VR58 MB1SPK SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR58 MB1SPK SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2319981.8	104.9	%	0.48				0.46%
ScR 361.383	284472.6	103.6	%	0.62				0.60%
Ag 328.068†	79239.0	0.5324	mg/L	0.00077	1.065	mg/L	0.0015	0.15%
Al 308.215†	2831.7	2.080	mg/L	0.0212	4.160	mg/L	0.0423	1.02%
As 188.979†	3199.9	2.054	mg/L	0.0144	4.107	mg/L	0.0289	0.70%
B 249.677†	12.0	0.00079	mg/L	0.000882	0.00158	mg/L	0.001764	111.35%
Ba 233.527†	8039.6	2.033	mg/L	0.0245	4.065	mg/L	0.0489	1.20%
Be 313.042†	259548.0	0.4963	mg/L	0.00423	0.9927	mg/L	0.00845	0.85%
Ca 317.933†	118954.3	10.23	mg/L	0.107	20.46	mg/L	0.213	1.04%
Cd 228.802†	13450.4	0.5203	mg/L	0.00130	1.041	mg/L	0.0026	0.25%
Co 228.616†	17061.2	0.5091	mg/L	0.00079	1.018	mg/L	0.0016	0.15%
Cr 267.716†	2852.2	0.5119	mg/L	0.00494	1.024	mg/L	0.0099	0.97%
Cu 324.752†	108532.4	0.4934	mg/L	0.00145	0.9869	mg/L	0.00290	0.29%
Fe 273.955†	2529.2	2.147	mg/L	0.0175	4.294	mg/L	0.0350	0.81%
K 766.490†	17260.5	10.18	mg/L	0.090	20.35	mg/L	0.181	0.89%
Mg 279.077†	12120.6	10.68	mg/L	0.126	21.36	mg/L	0.252	1.18%
Mn 257.610†	16583.1	0.5065	mg/L	0.00443	1.013	mg/L	0.0089	0.88%
Mo 202.031†	17.7	0.00089	mg/L	0.000403	0.00177	mg/L	0.000806	45.49%
Na 589.592†	98227.4	9.644	mg/L	0.0536	19.29	mg/L	0.107	0.56%
Na 330.237†	258.5	10.44	mg/L	0.151	20.88	mg/L	0.301	1.44%
Ni 231.604†	1833.4	0.4947	mg/L	0.00635	0.9895	mg/L	0.01270	1.28%
Pb 220.353†	14138.2	1.990	mg/L	0.0019	3.980	mg/L	0.0038	0.10%
Sb 206.836†	6082.7	2.141	mg/L	0.0146	4.281	mg/L	0.0292	0.68%
Se 196.026†	2632.2	2.043	mg/L	0.0081	4.087	mg/L	0.0162	0.40%
Si 288.158†	-0.9	0.00269	mg/L	0.001038	0.00538	mg/L	0.002076	38.59%
Sn 189.927†	-18.1	-0.00319	mg/L	0.000530	-0.00639	mg/L	0.001060	16.60%
Sr 421.552†	358641.6	0.4915	mg/L	0.00360	0.9830	mg/L	0.00721	0.73%
Ti 334.903†	37.3	0.00167	mg/L	0.000102	0.00333	mg/L	0.000204	6.11%
Tl 190.801†	4289.1	2.002	mg/L	0.0098	4.005	mg/L	0.0196	0.49%
V 292.402†	53700.3	0.5092	mg/L	0.00064	1.018	mg/L	0.0013	0.13%
Zn 206.200†	1717.8	0.5014	mg/L	0.00617	1.003	mg/L	0.0123	1.23%

Sequence No.: 11
Sample ID: CV 2

Autosampler Location: 7
Date Collected: 11/27/2012 11:46:26 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2304737.8	104.2	%	0.47				0.45%
ScR 361.383	283599.2	103.3	%	1.75				1.70%
Ag 328.068†	152737.5	1.026	mg/L	0.0044	1.026	mg/L	0.0044	0.43%
Al 308.215†	2811.5	2.038	mg/L	0.0396	2.038	mg/L	0.0396	1.94%
As 188.979†	3115.8	2.027	mg/L	0.0117	2.027	mg/L	0.0117	0.58%
B 249.677†	6293.1	0.9608	mg/L	0.01625	0.9608	mg/L	0.01625	1.69%
Ba 233.527†	3945.0	0.9971	mg/L	0.01725	0.9971	mg/L	0.01725	1.73%
Be 313.042†	502279.7	0.9605	mg/L	0.01887	0.9605	mg/L	0.01887	1.96%
Ca 317.933†	23081.9	1.985	mg/L	0.0357	1.985	mg/L	0.0357	1.80%
Cd 228.802†	25709.1	1.007	mg/L	0.0053	1.007	mg/L	0.0053	0.53%
Co 228.616†	33092.8	0.9859	mg/L	0.00533	0.9859	mg/L	0.00533	0.54%
Cr 267.716†	5571.3	1.002	mg/L	0.0162	1.002	mg/L	0.0162	1.61%
Cu 324.752†	221787.5	1.008	mg/L	0.0055	1.008	mg/L	0.0055	0.55%
Fe 273.955†	2485.7	2.107	mg/L	0.0352	2.107	mg/L	0.0352	1.67%
K 766.490†	34106.7	20.11	mg/L	0.497	20.11	mg/L	0.497	2.47%
Mg 279.077†	2347.6	2.075	mg/L	0.0388	2.075	mg/L	0.0388	1.87%
Mn 257.610†	31551.9	0.9634	mg/L	0.01703	0.9634	mg/L	0.01703	1.77%
Mo 202.031†	17430.8	1.007	mg/L	0.0066	1.007	mg/L	0.0066	0.66%
Na 589.592†	491899.5	48.29	mg/L	0.980	48.29	mg/L	0.980	2.03%
Na 330.237†	1297.9	53.15	mg/L	0.865	53.15	mg/L	0.865	1.63%
Ni 231.604†	3590.5	0.9686	mg/L	0.01514	0.9686	mg/L	0.01514	1.56%
Pb 220.353†	13898.8	1.957	mg/L	0.0136	1.957	mg/L	0.0136	0.70%
Sb 206.836†	6116.3	2.157	mg/L	0.0114	2.157	mg/L	0.0114	0.53%
Se 196.026†	2556.4	1.984	mg/L	0.0084	1.984	mg/L	0.0084	0.42%
Si 288.158†	3666.3	2.212	mg/L	0.0382	2.212	mg/L	0.0382	1.73%
Sn 189.927†	3388.0	1.032	mg/L	0.0026	1.032	mg/L	0.0026	0.26%
Sr 421.552†	694492.9	0.9518	mg/L	0.01870	0.9518	mg/L	0.01870	1.96%
Ti 334.903†	17761.6	1.073	mg/L	0.0220	1.073	mg/L	0.0220	2.05%
Tl 190.801†	4264.9	1.987	mg/L	0.0110	1.987	mg/L	0.0110	0.55%
V 292.402†	105507.4	1.000	mg/L	0.0048	1.000	mg/L	0.0048	0.48%
Zn 206.200†	3441.7	1.004	mg/L	0.0201	1.004	mg/L	0.0201	2.00%

Sequence No.: 12
Sample ID: CB 2

Autosampler Location: 1
Date Collected: 11/27/2012 11:51:30 AM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2312045.3	104.6	%	0.30				0.29%
ScR 361.383	285840.4	104.1	%	0.40				0.39%
Ag 328.068†	-0.9	-0.00001	mg/L	0.000268	-0.00001	mg/L	0.000268	>999.9%
Al 308.215†	-4.8	-0.00356	mg/L	0.002879	-0.00356	mg/L	0.002879	80.90%
As 188.979†	-0.2	-0.00014	mg/L	0.000550	-0.00014	mg/L	0.000550	390.47%
B 249.677†	15.2	0.00233	mg/L	0.000428	0.00233	mg/L	0.000428	18.41%
Ba 233.527†	-0.6	-0.00016	mg/L	0.001663	-0.00016	mg/L	0.001663	>999.9%
Be 313.042†	20.9	0.00004	mg/L	0.000048	0.00004	mg/L	0.000048	120.80%
Ca 317.933†	-4.3	-0.00037	mg/L	0.000156	-0.00037	mg/L	0.000156	42.42%
Cd 228.802†	-1.5	-0.00006	mg/L	0.000016	-0.00006	mg/L	0.000016	27.64%
Co 228.616†	-1.5	-0.00004	mg/L	0.000066	-0.00004	mg/L	0.000066	154.88%
Cr 267.716†	1.5	0.00027	mg/L	0.001200	0.00027	mg/L	0.001200	450.39%
Cu 324.752†	-135.3	-0.00062	mg/L	0.000199	-0.00062	mg/L	0.000199	32.37%
Fe 273.955†	0.6	0.00052	mg/L	0.001489	0.00052	mg/L	0.001489	286.07%
K 766.490†	-16.1	-0.00951	mg/L	0.010206	-0.00951	mg/L	0.010206	107.32%
Mg 279.077†	2.1	0.00184	mg/L	0.007421	0.00184	mg/L	0.007421	402.35%
Mn 257.610†	6.2	0.00019	mg/L	0.000040	0.00019	mg/L	0.000040	21.02%
Mo 202.031†	14.0	0.00081	mg/L	0.000267	0.00081	mg/L	0.000267	33.02%
Na 589.592†	45.8	0.00450	mg/L	0.003517	0.00450	mg/L	0.003517	78.16%
Na 330.237†	10.5	0.4290	mg/L	0.47023	0.4290	mg/L	0.47023	109.62%
Ni 231.604†	1.9	0.00051	mg/L	0.000245	0.00051	mg/L	0.000245	48.11%
Pb 220.353†	9.0	0.00127	mg/L	0.000748	0.00127	mg/L	0.000748	58.95%
Sb 206.836†	6.8	0.00240	mg/L	0.001394	0.00240	mg/L	0.001394	58.00%
Se 196.026†	-8.4	-0.00650	mg/L	0.003997	-0.00650	mg/L	0.003997	61.54%
Si 288.158†	2.5	0.00150	mg/L	0.004567	0.00150	mg/L	0.004567	303.82%
Sn 189.927†	2.3	0.00070	mg/L	0.000906	0.00070	mg/L	0.000906	130.30%
Sr 421.552†	50.6	0.00007	mg/L	0.000047	0.00007	mg/L	0.000047	68.24%
Ti 334.903†	-22.4	-0.00136	mg/L	0.000860	-0.00136	mg/L	0.000860	63.34%
Tl 190.801†	6.9	0.00325	mg/L	0.002539	0.00325	mg/L	0.002539	78.13%
V 292.402†	14.5	0.00014	mg/L	0.000182	0.00014	mg/L	0.000182	130.93%
Zn 206.200†	1.2	0.00034	mg/L	0.000296	0.00034	mg/L	0.000296	87.00%

Sequence No.: 13
Sample ID: VR58 F SWC

Autosampler Location: 314
Date Collected: 11/27/2012 11:55:45 AM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: VR58 F SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR58 F SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2371495.1	107.3	%	0.21				0.19%
ScR 361.383	293651.8	106.9	%	0.96				0.90%
Ag 328.068†	5.3	0.00009	mg/L	0.000187	0.00018	mg/L	0.000375	208.10%
Al 308.215†	90400.3	66.63	mg/L	0.077	133.3	mg/L	0.15	0.12%
As 188.979†	-147.0	0.03089	mg/L	0.003301	0.06177	mg/L	0.006602	10.69%
B 249.677†	90.3	0.01371	mg/L	0.001442	0.02741	mg/L	0.002885	10.52%
Ba 233.527†	1594.5	0.3864	mg/L	0.00238	0.7729	mg/L	0.00476	0.62%
Be 313.042†	519.9	0.00090	mg/L	0.000022	0.00181	mg/L	0.000044	2.46%
Ca 317.933†	336360.1	28.93	mg/L	0.137	57.85	mg/L	0.274	0.47%
Cd 228.802†	80.7	0.00299	mg/L	0.000112	0.00598	mg/L	0.000224	3.75%
Co 228.616†	1666.8	0.03980	mg/L	0.000130	0.07960	mg/L	0.000260	0.33%
Cr 267.716†	884.6	0.1603	mg/L	0.00087	0.3206	mg/L	0.00174	0.54%
Cu 324.752†	107191.2	0.4906	mg/L	0.00216	0.9813	mg/L	0.00431	0.44%
Fe 273.955†	120142.0	102.2	mg/L	0.81	204.3	mg/L	1.62	0.79%
K 766.490†	6560.7	3.868	mg/L	0.0197	7.736	mg/L	0.0394	0.51%
Mg 279.077†	30643.3	26.94	mg/L	0.198	53.88	mg/L	0.396	0.74%
Mn 257.610†	54271.3	1.657	mg/L	0.0114	3.313	mg/L	0.0229	0.69%
Mo 202.031†	55.6	0.00289	mg/L	0.000240	0.00577	mg/L	0.000481	8.32%
Na 589.592†	16659.4	1.636	mg/L	0.0047	3.271	mg/L	0.0094	0.29%
Na 330.237†	29.8	1.970	mg/L	0.0958	3.941	mg/L	0.1915	4.86%
Ni 231.604†	577.0	0.1556	mg/L	0.00082	0.3112	mg/L	0.00163	0.52%
Pb 220.353†	724.0	0.1132	mg/L	0.00069	0.2264	mg/L	0.00138	0.61%
Sb 206.836†	10.4	0.00398	mg/L	0.001286	0.00795	mg/L	0.002572	32.34%
Se 196.026†	4.0	0.00300	mg/L	0.006101	0.00601	mg/L	0.012203	203.14%
Si 288.158†	9107.4	5.499	mg/L	0.0387	11.00	mg/L	0.077	0.70%
Sn 189.927†	-23.7	-0.00300	mg/L	0.000446	-0.00601	mg/L	0.000891	14.84%
Sr 421.552†	130401.0	0.1787	mg/L	0.00015	0.3574	mg/L	0.00029	0.08%
Ti 334.903†	73424.2	4.440	mg/L	0.0159	8.879	mg/L	0.0317	0.36%
Tl 190.801†	-10.7	0.00493	mg/L	0.002625	0.00986	mg/L	0.005250	53.24%
V 292.402†	19888.8	0.1826	mg/L	0.00070	0.3653	mg/L	0.00140	0.38%
Zn 206.200†	2744.0	0.8008	mg/L	0.00531	1.602	mg/L	0.0106	0.66%

Sequence No.: 14
Sample ID: VR58 G SWC

Autosampler Location: 315
Date Collected: 11/27/2012 11:59:45 AM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: VR58 G SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VR58 G SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2375973.6	107.5	%	0.49				0.46%
ScR 361.383	294345.6	107.2	%	0.34				0.31%
Ag 328.068†	-108.2	-0.00067	mg/L	0.000136	-0.00134	mg/L	0.000271	20.24%
Al 308.215†	95113.4	70.10	mg/L	0.201	140.2	mg/L	0.40	0.29%
As 188.979†	-200.9	0.01436	mg/L	0.001737	0.02872	mg/L	0.003475	12.10%
B 249.677†	70.6	0.01067	mg/L	0.000084	0.02134	mg/L	0.000168	0.79%
Ba 233.527†	1447.7	0.3492	mg/L	0.00228	0.6985	mg/L	0.00456	0.65%
Be 313.042†	453.8	0.00077	mg/L	0.000010	0.00154	mg/L	0.000020	1.29%
Ca 317.933†	331490.0	28.51	mg/L	0.084	57.02	mg/L	0.169	0.30%
Cd 228.802†	40.8	0.00163	mg/L	0.000187	0.00326	mg/L	0.000374	11.46%
Co 228.616†	1862.3	0.04441	mg/L	0.000125	0.08882	mg/L	0.000250	0.28%
Cr 267.716†	893.5	0.1615	mg/L	0.00128	0.3230	mg/L	0.00256	0.79%
Cu 324.752†	8708.9	0.04282	mg/L	0.000373	0.08563	mg/L	0.000746	0.87%
Fe 273.955†	120764.9	102.7	mg/L	0.43	205.4	mg/L	0.85	0.41%
K 766.490†	5385.0	3.175	mg/L	0.0186	6.350	mg/L	0.0372	0.59%
Mg 279.077†	36718.3	32.29	mg/L	0.146	64.58	mg/L	0.292	0.45%
Mn 257.610†	45362.0	1.385	mg/L	0.0048	2.770	mg/L	0.0095	0.34%
Mo 202.031†	39.8	0.00198	mg/L	0.000171	0.00397	mg/L	0.000342	8.62%
Na 589.592†	18459.1	1.812	mg/L	0.0067	3.625	mg/L	0.0134	0.37%
Na 330.237†	27.9	2.154	mg/L	0.0522	4.307	mg/L	0.1044	2.42%
Ni 231.604†	579.0	0.1561	mg/L	0.00091	0.3123	mg/L	0.00181	0.58%
Pb 220.353†	302.5	0.05536	mg/L	0.000745	0.1107	mg/L	0.00149	1.35%
Sb 206.836†	3.0	0.00161	mg/L	0.001604	0.00323	mg/L	0.003209	99.40%
Se 196.026†	-3.0	-0.00251	mg/L	0.005713	-0.00501	mg/L	0.011427	227.93%
Si 288.158†	9573.5	5.781	mg/L	0.0303	11.56	mg/L	0.061	0.52%
Sn 189.927†	-36.4	-0.00683	mg/L	0.000541	-0.01365	mg/L	0.001081	7.92%
Sr 421.552†	89921.6	0.1232	mg/L	0.00047	0.2465	mg/L	0.00094	0.38%
Ti 334.903†	83863.3	5.071	mg/L	0.0191	10.14	mg/L	0.038	0.38%
Tl 190.801†	-8.7	0.00585	mg/L	0.001235	0.01170	mg/L	0.002470	21.11%
V 292.402†	20697.0	0.1899	mg/L	0.00115	0.3797	mg/L	0.00231	0.61%
Zn 206.200†	1502.7	0.4385	mg/L	0.00336	0.8771	mg/L	0.00672	0.77%

Sequence No.: 15
Sample ID: VR58 H SWC

Dilution: 2.000000X

Autosampler Location: 316
Date Collected: 11/27/2012 12:03:45 PM
Data Type: Original

Nebulizer Parameters: VR58 H SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR58 H SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2360270.6	106.8	%	0.62				0.58%
ScR 361.383	288122.4	104.9	%	0.23				0.22%
Ag 328.068†	-144.9	-0.00090	mg/L	0.000411	-0.00181	mg/L	0.000823	45.47%
Al 308.215†	107562.4	79.27	mg/L	0.090	158.5	mg/L	0.18	0.11%
As 188.979†	-242.2	0.01146	mg/L	0.001727	0.02292	mg/L	0.003453	15.07%
B 249.677†	96.4	0.01460	mg/L	0.000552	0.02920	mg/L	0.001104	3.78%
Ba 233.527†	1299.4	0.3105	mg/L	0.00123	0.6211	mg/L	0.00247	0.40%
Be 313.042†	579.0	0.00099	mg/L	0.000007	0.00198	mg/L	0.000014	0.71%
Ca 317.933†	441316.9	37.95	mg/L	0.161	75.91	mg/L	0.323	0.43%
Cd 228.802†	34.3	0.00154	mg/L	0.000062	0.00307	mg/L	0.000124	4.04%
Co 228.616†	2088.0	0.04941	mg/L	0.000231	0.09883	mg/L	0.000463	0.47%
Cr 267.716†	1379.6	0.2483	mg/L	0.00138	0.4965	mg/L	0.00277	0.56%
Cu 324.752†	9206.7	0.04513	mg/L	0.000178	0.09026	mg/L	0.000356	0.39%
Fe 273.955†	129019.4	109.7	mg/L	0.20	219.4	mg/L	0.40	0.18%
K 766.490†	6136.6	3.618	mg/L	0.0073	7.236	mg/L	0.0147	0.20%
Mg 279.077†	48046.7	42.27	mg/L	0.143	84.54	mg/L	0.286	0.34%
Mn 257.610†	54938.8	1.677	mg/L	0.0018	3.354	mg/L	0.0036	0.11%
Mo 202.031†	45.6	0.00221	mg/L	0.000136	0.00442	mg/L	0.000272	6.15%
Na 589.592†	15203.7	1.493	mg/L	0.0017	2.985	mg/L	0.0034	0.11%
Na 330.237†	9.5	1.621	mg/L	0.2274	3.241	mg/L	0.4549	14.03%
Ni 231.604†	790.3	0.2131	mg/L	0.00134	0.4262	mg/L	0.00269	0.63%
Pb 220.353†	140.3	0.03460	mg/L	0.000375	0.06920	mg/L	0.000749	1.08%
Sb 206.836†	15.6	0.00530	mg/L	0.000875	0.01060	mg/L	0.001750	16.51%
Se 196.026†	1.7	0.00114	mg/L	0.004283	0.00228	mg/L	0.008567	375.66%
Si 288.158†	9803.5	5.921	mg/L	0.0085	11.84	mg/L	0.017	0.14%
Sn 189.927†	-45.1	-0.00818	mg/L	0.000978	-0.01637	mg/L	0.001956	11.95%
Sr 421.552†	99359.0	0.1362	mg/L	0.00009	0.2723	mg/L	0.00019	0.07%
Ti 334.903†	97880.9	5.919	mg/L	0.0075	11.84	mg/L	0.015	0.13%
Tl 190.801†	-11.0	0.00531	mg/L	0.002521	0.01063	mg/L	0.005041	47.43%
V 292.402†	25013.2	0.2303	mg/L	0.00066	0.4606	mg/L	0.00132	0.29%
Zn 206.200†	1213.1	0.3540	mg/L	0.00030	0.7080	mg/L	0.00060	0.09%

Sequence No.: 16
Sample ID: VR58 I SWC

Autosampler Location: 317
Date Collected: 11/27/2012 12:07:44 PM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: VR58 I SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR58 I SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2411021.5	109.1	%	0.54				0.49%
ScR 361.383	296446.9	107.9	%	0.60				0.55%
Ag 328.068†	-128.8	-0.00080	mg/L	0.000202	-0.00159	mg/L	0.000403	25.32%
Al 308.215†	127620.0	94.06	mg/L	0.406	188.1	mg/L	0.81	0.43%
As 188.979†	-219.6	0.01308	mg/L	0.003119	0.02616	mg/L	0.006238	23.85%
B 249.677†	89.4	0.01358	mg/L	0.000997	0.02716	mg/L	0.001993	7.34%
Ba 233.527†	2503.8	0.6179	mg/L	0.00462	1.236	mg/L	0.0092	0.75%
Be 313.042†	672.9	0.00117	mg/L	0.000025	0.00235	mg/L	0.000051	2.16%
Ca 317.933†	297877.2	25.62	mg/L	0.123	51.23	mg/L	0.246	0.48%
Cd 228.802†	26.5	0.00124	mg/L	0.000120	0.00249	mg/L	0.000239	9.61%
Co 228.616†	1443.4	0.03129	mg/L	0.000210	0.06259	mg/L	0.000421	0.67%
Cr 267.716†	1393.5	0.2514	mg/L	0.00124	0.5028	mg/L	0.00248	0.49%
Cu 324.752†	13250.4	0.06297	mg/L	0.000291	0.1259	mg/L	0.00058	0.46%
Fe 273.955†	108725.5	92.45	mg/L	0.604	184.9	mg/L	1.21	0.65%
K 766.490†	5062.5	2.985	mg/L	0.0131	5.969	mg/L	0.0262	0.44%
Mg 279.077†	31239.4	27.47	mg/L	0.121	54.94	mg/L	0.241	0.44%
Mn 257.610†	76295.3	2.329	mg/L	0.0132	4.657	mg/L	0.0264	0.57%
Mo 202.031†	80.2	0.00434	mg/L	0.000252	0.00868	mg/L	0.000505	5.81%
Na 589.592†	16140.8	1.585	mg/L	0.0109	3.169	mg/L	0.0219	0.69%
Na 330.237†	15.4	1.771	mg/L	0.5537	3.543	mg/L	1.1074	31.26%
Ni 231.604†	590.9	0.1594	mg/L	0.00166	0.3187	mg/L	0.00332	1.04%
Pb 220.353†	83.5	0.03084	mg/L	0.000658	0.06167	mg/L	0.001316	2.13%
Sb 206.836†	2.6	0.00052	mg/L	0.003619	0.00105	mg/L	0.007238	690.89%
Se 196.026†	6.5	0.00487	mg/L	0.002705	0.00973	mg/L	0.005410	55.59%
Si 288.158†	12497.5	7.545	mg/L	0.0523	15.09	mg/L	0.105	0.69%
Sn 189.927†	-33.3	-0.00619	mg/L	0.001177	-0.01238	mg/L	0.002353	19.01%
Sr 421.552†	120277.5	0.1648	mg/L	0.00065	0.3297	mg/L	0.00130	0.40%
Ti 334.903†	90047.0	5.445	mg/L	0.0228	10.89	mg/L	0.046	0.42%
Tl 190.801†	-10.6	0.00379	mg/L	0.005938	0.00757	mg/L	0.011876	156.79%
V 292.402†	25113.2	0.2322	mg/L	0.00150	0.4645	mg/L	0.00300	0.65%
Zn 206.200†	1027.6	0.2999	mg/L	0.00340	0.5998	mg/L	0.00679	1.13%

Sequence No.: 17
Sample ID: VR58 J SWC

Dilution: 2.000000X

Autosampler Location: 318
Date Collected: 11/27/2012 12:11:43 PM
Data Type: Original

Nebulizer Parameters: VR58 J SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR58 J SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2366873.1	107.1	%	1.06				0.99%
ScR 361.383	290123.6	105.6	%	0.52				0.49%
Ag 328.068†	-107.2	-0.00066	mg/L	0.000086	-0.00131	mg/L	0.000173	13.16%
Al 308.215†	97766.6	72.06	mg/L	0.255	144.1	mg/L	0.51	0.35%
As 188.979†	-205.2	0.01551	mg/L	0.001629	0.03101	mg/L	0.003258	10.51%
B 249.677†	70.7	0.01069	mg/L	0.001052	0.02138	mg/L	0.002105	9.84%
Ba 233.527†	1264.0	0.3016	mg/L	0.00253	0.6033	mg/L	0.00505	0.84%
Be 313.042†	532.0	0.00091	mg/L	0.000035	0.00182	mg/L	0.000071	3.88%
Ca 317.933†	352093.3	30.28	mg/L	0.173	60.56	mg/L	0.346	0.57%
Cd 228.802†	30.6	0.00121	mg/L	0.000304	0.00242	mg/L	0.000608	25.14%
Co 228.616†	1914.8	0.04561	mg/L	0.000423	0.09122	mg/L	0.000846	0.93%
Cr 267.716†	1314.6	0.2371	mg/L	0.00212	0.4742	mg/L	0.00424	0.89%
Cu 324.752†	9819.3	0.04810	mg/L	0.000489	0.09621	mg/L	0.000979	1.02%
Fe 273.955†	128885.5	109.6	mg/L	0.95	219.2	mg/L	1.90	0.87%
K 766.490†	5848.1	3.448	mg/L	0.0134	6.896	mg/L	0.0269	0.39%
Mg 279.077†	41571.1	36.56	mg/L	0.225	73.13	mg/L	0.450	0.61%
Mn 257.610†	59850.8	1.827	mg/L	0.0108	3.654	mg/L	0.0216	0.59%
Mo 202.031†	44.1	0.00221	mg/L	0.000273	0.00441	mg/L	0.000547	12.40%
Na 589.592†	14397.4	1.414	mg/L	0.0071	2.827	mg/L	0.0141	0.50%
Na 330.237†	11.1	1.526	mg/L	0.1449	3.052	mg/L	0.2898	9.50%
Ni 231.604†	701.4	0.1891	mg/L	0.00141	0.3783	mg/L	0.00281	0.74%
Pb 220.353†	148.9	0.03407	mg/L	0.001183	0.06815	mg/L	0.002367	3.47%
Sb 206.836†	11.6	0.00370	mg/L	0.002569	0.00741	mg/L	0.005138	69.38%
Se 196.026†	3.5	0.00256	mg/L	0.001861	0.00511	mg/L	0.003722	72.81%
Si 288.158†	11293.4	6.820	mg/L	0.0521	13.64	mg/L	0.104	0.76%
Sn 189.927†	-39.3	-0.00746	mg/L	0.001030	-0.01492	mg/L	0.002060	13.81%
Sr 421.552†	95791.6	0.1313	mg/L	0.00025	0.2626	mg/L	0.00050	0.19%
Ti 334.903†	86229.9	5.214	mg/L	0.0203	10.43	mg/L	0.041	0.39%
Tl 190.801†	-13.2	0.00437	mg/L	0.001496	0.00873	mg/L	0.002992	34.26%
V 292.402†	23416.9	0.2156	mg/L	0.00198	0.4312	mg/L	0.00396	0.92%
Zn 206.200†	1194.4	0.3486	mg/L	0.00267	0.6971	mg/L	0.00535	0.77%

Sequence No.: 18
Sample ID: VR82 A SWC

Dilution: 2.000000X

Autosampler Location: 319
Date Collected: 11/27/2012 12:15:42 PM
Data Type: Original

Nebulizer Parameters: VR82 A SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VR82 A SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2373357.6	107.3	%	0.49				0.45%
ScR 361.383	292156.4	106.4	%	0.74				0.69%
Ag 328.068†	-60.3	-0.00036	mg/L	0.000169	-0.00073	mg/L	0.000338	46.29%
Al 308.215†	68678.8	50.62	mg/L	0.250	101.2	mg/L	0.50	0.49%
As 188.979†	-102.6	0.02722	mg/L	0.002044	0.05443	mg/L	0.004088	7.51%
B 249.677†	62.9	0.00954	mg/L	0.000937	0.01908	mg/L	0.001875	9.83%
Ba 233.527†	1331.1	0.3258	mg/L	0.00115	0.6517	mg/L	0.00230	0.35%
Be 313.042†	380.1	0.00066	mg/L	0.000025	0.00132	mg/L	0.000050	3.78%
Ca 317.933†	220150.6	18.93	mg/L	0.069	37.87	mg/L	0.138	0.36%
Cd 228.802†	86.4	0.00334	mg/L	0.000104	0.00668	mg/L	0.000207	3.10%
Co 228.616†	1180.0	0.02796	mg/L	0.000069	0.05592	mg/L	0.000137	0.25%
Cr 267.716†	766.5	0.1386	mg/L	0.00147	0.2772	mg/L	0.00295	1.06%
Cu 324.752†	50029.4	0.2295	mg/L	0.00176	0.4590	mg/L	0.00352	0.77%
Fe 273.955†	77136.7	65.59	mg/L	0.308	131.2	mg/L	0.62	0.47%
K 766.490†	4471.4	2.636	mg/L	0.0185	5.272	mg/L	0.0370	0.70%
Mg 279.077†	19178.5	16.86	mg/L	0.041	33.72	mg/L	0.081	0.24%
Mn 257.610†	60737.6	1.854	mg/L	0.0058	3.708	mg/L	0.0117	0.32%
Mo 202.031†	50.9	0.00273	mg/L	0.000370	0.00546	mg/L	0.000741	13.57%
Na 589.592†	10544.9	1.035	mg/L	0.0043	2.071	mg/L	0.0086	0.42%
Na 330.237†	16.5	1.238	mg/L	0.3748	2.476	mg/L	0.7497	30.28%
Ni 231.604†	438.4	0.1182	mg/L	0.00061	0.2364	mg/L	0.00122	0.51%
Pb 220.353†	1026.8	0.1538	mg/L	0.00112	0.3076	mg/L	0.00225	0.73%
Sb 206.836†	2.8	0.00097	mg/L	0.000624	0.00194	mg/L	0.001248	64.45%
Se 196.026†	0.3	0.00012	mg/L	0.001198	0.00025	mg/L	0.002396	973.20%
Si 288.158†	9705.3	5.859	mg/L	0.0198	11.72	mg/L	0.040	0.34%
Sn 189.927†	-6.6	0.00080	mg/L	0.001041	0.00161	mg/L	0.002082	129.55%
Sr 421.552†	81532.3	0.1117	mg/L	0.00051	0.2235	mg/L	0.00101	0.45%
Ti 334.903†	54521.5	3.297	mg/L	0.0115	6.594	mg/L	0.0230	0.35%
Tl 190.801†	-7.2	0.00294	mg/L	0.000964	0.00587	mg/L	0.001928	32.85%
V 292.402†	14825.4	0.1367	mg/L	0.00117	0.2734	mg/L	0.00233	0.85%
Zn 206.200†	1968.8	0.5746	mg/L	0.00140	1.149	mg/L	0.0028	0.24%

Sequence No.: 19
Sample ID: VR82 B SWC

Autosampler Location: 320
Date Collected: 11/27/2012 12:19:41 PM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: VR82 B SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VR82 B SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2374866.4	107.4	%	0.06				0.06%
ScR 361.383	291380.8	106.1	%	0.87				0.82%
Ag 328.068†	-52.5	-0.00031	mg/L	0.000317	-0.00063	mg/L	0.000634	100.62%
Al 308.215†	59607.8	43.93	mg/L	0.140	87.86	mg/L	0.281	0.32%
As 188.979†	-88.7	0.02356	mg/L	0.001473	0.04711	mg/L	0.002945	6.25%
B 249.677†	70.5	0.01070	mg/L	0.001052	0.02140	mg/L	0.002105	9.83%
Ba 233.527†	1384.3	0.3386	mg/L	0.00263	0.6773	mg/L	0.00527	0.78%
Be 313.042†	359.0	0.00063	mg/L	0.000021	0.00125	mg/L	0.000043	3.41%
Ca 317.933†	202670.9	17.43	mg/L	0.082	34.86	mg/L	0.164	0.47%
Cd 228.802†	73.2	0.00271	mg/L	0.000088	0.00542	mg/L	0.000177	3.26%
Co 228.616†	1084.2	0.02591	mg/L	0.000223	0.05182	mg/L	0.000445	0.86%
Cr 267.716†	704.5	0.1278	mg/L	0.00087	0.2555	mg/L	0.00174	0.68%
Cu 324.752†	44769.1	0.2059	mg/L	0.00126	0.4117	mg/L	0.00252	0.61%
Fe 273.955†	81635.6	69.42	mg/L	0.441	138.8	mg/L	0.88	0.64%
K 766.490†	4146.4	2.445	mg/L	0.0171	4.889	mg/L	0.0343	0.70%
Mg 279.077†	16938.2	14.88	mg/L	0.149	29.77	mg/L	0.298	1.00%
Mn 257.610†	70859.3	2.163	mg/L	0.0096	4.326	mg/L	0.0192	0.44%
Mo 202.031†	46.0	0.00246	mg/L	0.000325	0.00492	mg/L	0.000649	13.19%
Na 589.592†	9917.4	0.9737	mg/L	0.00359	1.947	mg/L	0.0072	0.37%
Na 330.237†	15.2	1.068	mg/L	0.2577	2.137	mg/L	0.5155	24.12%
Ni 231.604†	393.6	0.1062	mg/L	0.00061	0.2123	mg/L	0.00123	0.58%
Pb 220.353†	650.5	0.09913	mg/L	0.000624	0.1983	mg/L	0.00125	0.63%
Sb 206.836†	4.5	0.00149	mg/L	0.002759	0.00298	mg/L	0.005519	185.11%
Se 196.026†	3.1	0.00233	mg/L	0.000240	0.00465	mg/L	0.000479	10.30%
Si 288.158†	9271.2	5.597	mg/L	0.0472	11.19	mg/L	0.094	0.84%
Sn 189.927†	-9.1	-0.00020	mg/L	0.001638	-0.00040	mg/L	0.003277	818.64%
Sr 421.552†	72470.9	0.09932	mg/L	0.000328	0.1986	mg/L	0.00066	0.33%
Ti 334.903†	47164.9	2.852	mg/L	0.0108	5.704	mg/L	0.0217	0.38%
Tl 190.801†	-2.4	0.00564	mg/L	0.001162	0.01128	mg/L	0.002325	20.62%
V 292.402†	13821.2	0.1273	mg/L	0.00046	0.2547	mg/L	0.00091	0.36%
Zn 206.200†	2138.7	0.6242	mg/L	0.00591	1.248	mg/L	0.0118	0.95%

Sequence No.: 20
Sample ID: VR82 C SWC

Dilution: 2.000000X

Autosampler Location: 321
Date Collected: 11/27/2012 12:23:40 PM
Data Type: Original

Nebulizer Parameters: VR82 C SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VR82 C SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2361657.1	106.8	%	0.64				0.60%
ScR 361.383	290221.0	105.7	%	0.83				0.79%
Ag 328.068†	-205.5	-0.00129	mg/L	0.000106	-0.00258	mg/L	0.000213	8.24%
Al 308.215†	158872.8	117.1	mg/L	0.08	234.2	mg/L	0.16	0.07%
As 188.979†	-245.5	0.02731	mg/L	0.001583	0.05461	mg/L	0.003165	5.80%
B 249.677†	75.9	0.01146	mg/L	0.001139	0.02292	mg/L	0.002277	9.93%
Ba 233.527†	1711.9	0.4084	mg/L	0.00365	0.8168	mg/L	0.00730	0.89%
Be 313.042†	804.2	0.00140	mg/L	0.000031	0.00279	mg/L	0.000062	2.23%
Ca 317.933†	671666.4	57.76	mg/L	0.281	115.5	mg/L	0.56	0.49%
Cd 228.802†	58.2	0.00215	mg/L	0.000142	0.00430	mg/L	0.000285	6.62%
Co 228.616†	2208.8	0.05119	mg/L	0.000416	0.1024	mg/L	0.00083	0.81%
Cr 267.716†	1620.3	0.2925	mg/L	0.00094	0.5850	mg/L	0.00188	0.32%
Cu 324.752†	25822.5	0.1222	mg/L	0.00056	0.2445	mg/L	0.00113	0.46%
Fe 273.955†	175411.1	149.2	mg/L	0.84	298.3	mg/L	1.68	0.56%
K 766.490†	10533.1	6.210	mg/L	0.0099	12.42	mg/L	0.020	0.16%
Mg 279.077†	52399.8	46.08	mg/L	0.137	92.16	mg/L	0.275	0.30%
Mn 257.610†	74697.7	2.280	mg/L	0.0079	4.560	mg/L	0.0159	0.35%
Mo 202.031†	65.3	0.00313	mg/L	0.000463	0.00627	mg/L	0.000926	14.77%
Na 589.592†	41848.7	4.109	mg/L	0.0039	8.217	mg/L	0.0078	0.10%
Na 330.237†	71.4	4.295	mg/L	0.1773	8.589	mg/L	0.3547	4.13%
Ni 231.604†	921.9	0.2486	mg/L	0.00214	0.4973	mg/L	0.00427	0.86%
Pb 220.353†	138.3	0.04173	mg/L	0.001019	0.08346	mg/L	0.002037	2.44%
Sb 206.836†	18.4	0.00623	mg/L	0.003698	0.01246	mg/L	0.007396	59.34%
Se 196.026†	6.6	0.00492	mg/L	0.002906	0.00984	mg/L	0.005811	59.04%
Si 288.158†	7159.0	4.326	mg/L	0.0262	8.652	mg/L	0.0524	0.61%
Sn 189.927†	-50.9	-0.00740	mg/L	0.002374	-0.01480	mg/L	0.004747	32.08%
Sr 421.552†	187150.2	0.2565	mg/L	0.00025	0.5130	mg/L	0.00050	0.10%
Ti 334.903†	108984.0	6.589	mg/L	0.0077	13.18	mg/L	0.015	0.12%
Tl 190.801†	-14.3	0.00770	mg/L	0.002826	0.01540	mg/L	0.005651	36.70%
V 292.402†	33111.7	0.3053	mg/L	0.00109	0.6106	mg/L	0.00217	0.36%
Zn 206.200†	1400.7	0.4088	mg/L	0.00322	0.8175	mg/L	0.00645	0.79%

Sequence No.: 21
Sample ID: VR82 D SWC

Dilution: 2.000000X

Autosampler Location: 322
Date Collected: 11/27/2012 12:27:26 PM
Data Type: Original

Nebulizer Parameters: VR82 D SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VR82 D SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2375541.9	107.4	%	0.51				0.48%
ScR 361.383	292815.2	106.6	%	0.86				0.81%
Ag 328.068†	-56.4	-0.00033	mg/L	0.000176	-0.00067	mg/L	0.000352	52.80%
Al 308.215†	71961.3	53.04	mg/L	0.259	106.1	mg/L	0.52	0.49%
As 188.979†	-107.9	0.02569	mg/L	0.000820	0.05139	mg/L	0.001640	3.19%
B 249.677†	75.8	0.01151	mg/L	0.000666	0.02302	mg/L	0.001332	5.79%
Ba 233.527†	1432.8	0.3490	mg/L	0.00339	0.6979	mg/L	0.00679	0.97%
Be 313.042†	431.3	0.00075	mg/L	0.000011	0.00151	mg/L	0.000022	1.48%
Ca 317.933†	251103.1	21.59	mg/L	0.047	43.19	mg/L	0.095	0.22%
Cd 228.802†	66.0	0.00242	mg/L	0.000213	0.00484	mg/L	0.000425	8.79%
Co 228.616†	1360.2	0.03300	mg/L	0.000363	0.06599	mg/L	0.000726	1.10%
Cr 267.716†	827.3	0.1498	mg/L	0.00181	0.2996	mg/L	0.00361	1.21%
Cu 324.752†	26382.1	0.1227	mg/L	0.00043	0.2453	mg/L	0.00086	0.35%
Fe 273.955†	95677.7	81.35	mg/L	0.100	162.7	mg/L	0.20	0.12%
K 766.490†	4419.3	2.605	mg/L	0.0127	5.211	mg/L	0.0254	0.49%
Mg 279.077†	23466.7	20.63	mg/L	0.092	41.26	mg/L	0.184	0.45%
Mn 257.610†	59699.5	1.822	mg/L	0.0020	3.645	mg/L	0.0039	0.11%
Mo 202.031†	60.6	0.00326	mg/L	0.000170	0.00652	mg/L	0.000340	5.22%
Na 589.592†	10917.0	1.072	mg/L	0.0064	2.144	mg/L	0.0128	0.60%
Na 330.237†	14.7	1.207	mg/L	0.2480	2.415	mg/L	0.4959	20.54%
Ni 231.604†	494.2	0.1333	mg/L	0.00093	0.2666	mg/L	0.00185	0.70%
Pb 220.353†	630.4	0.09816	mg/L	0.001132	0.1963	mg/L	0.00226	1.15%
Sb 206.836†	6.7	0.00231	mg/L	0.001731	0.00462	mg/L	0.003461	74.98%
Se 196.026†	-0.8	-0.00073	mg/L	0.003852	-0.00147	mg/L	0.007703	525.20%
Si 288.158†	11684.9	7.054	mg/L	0.0425	14.11	mg/L	0.085	0.60%
Sn 189.927†	-4.8	0.00171	mg/L	0.001631	0.00343	mg/L	0.003262	95.21%
Sr 421.552†	95052.7	0.1303	mg/L	0.00048	0.2605	mg/L	0.00095	0.36%
Ti 334.903†	55678.0	3.367	mg/L	0.0105	6.733	mg/L	0.0210	0.31%
Tl 190.801†	-7.8	0.00421	mg/L	0.002041	0.00841	mg/L	0.004083	48.53%
V 292.402†	16714.9	0.1540	mg/L	0.00023	0.3080	mg/L	0.00045	0.15%
Zn 206.200†	1683.4	0.4913	mg/L	0.00390	0.9826	mg/L	0.00780	0.79%

Sequence No.: 22
Sample ID: VR82 E SWC

Dilution: 2.000000X

Autosampler Location: 323
Date Collected: 11/27/2012 12:31:25 PM
Data Type: Original

Nebulizer Parameters: VR82 E SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VR82 E SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2373263.9	107.3	%	0.38				0.36%
ScR 361.383	296102.6	107.8	%	1.19				1.10%
Ag 328.068†	-51.4	-0.00030	mg/L	0.000305	-0.00060	mg/L	0.000610	102.24%
Al 308.215†	74080.4	54.60	mg/L	0.826	109.2	mg/L	1.65	1.51%
As 188.979†	-104.8	0.02164	mg/L	0.000925	0.04329	mg/L	0.001850	4.27%
B 249.677†	72.2	0.01095	mg/L	0.000744	0.02190	mg/L	0.001488	6.79%
Ba 233.527†	1515.4	0.3694	mg/L	0.00355	0.7388	mg/L	0.00710	0.96%
Be 313.042†	443.4	0.00078	mg/L	0.000018	0.00156	mg/L	0.000036	2.32%
Ca 317.933†	215440.1	18.53	mg/L	0.289	37.06	mg/L	0.577	1.56%
Cd 228.802†	67.7	0.00245	mg/L	0.000072	0.00489	mg/L	0.000143	2.93%
Co 228.616†	1357.5	0.03329	mg/L	0.000150	0.06658	mg/L	0.000300	0.45%
Cr 267.716†	944.8	0.1712	mg/L	0.00170	0.3424	mg/L	0.00340	0.99%
Cu 324.752†	28041.8	0.1304	mg/L	0.00081	0.2608	mg/L	0.00163	0.62%
Fe 273.955†	99045.7	84.22	mg/L	1.022	168.4	mg/L	2.04	1.21%
K 766.490†	4365.7	2.574	mg/L	0.0360	5.148	mg/L	0.0721	1.40%
Mg 279.077†	21838.9	19.19	mg/L	0.191	38.39	mg/L	0.383	1.00%
Mn 257.610†	65334.1	1.994	mg/L	0.0256	3.989	mg/L	0.0512	1.28%
Mo 202.031†	57.5	0.00311	mg/L	0.000414	0.00622	mg/L	0.000828	13.32%
Na 589.592†	10240.2	1.005	mg/L	0.0179	2.011	mg/L	0.0359	1.79%
Na 330.237†	18.4	1.313	mg/L	0.1612	2.625	mg/L	0.3223	12.28%
Ni 231.604†	505.3	0.1363	mg/L	0.00197	0.2726	mg/L	0.00394	1.45%
Pb 220.353†	590.8	0.09286	mg/L	0.000792	0.1857	mg/L	0.00158	0.85%
Sb 206.836†	8.4	0.00248	mg/L	0.001486	0.00497	mg/L	0.002972	59.81%
Se 196.026†	-3.5	-0.00281	mg/L	0.004535	-0.00562	mg/L	0.009070	161.40%
Si 288.158†	10688.1	6.452	mg/L	0.0671	12.90	mg/L	0.134	1.04%
Sn 189.927†	-17.0	-0.00243	mg/L	0.000171	-0.00486	mg/L	0.000343	7.05%
Sr 421.552†	87932.6	0.1205	mg/L	0.00188	0.2410	mg/L	0.00376	1.56%
Ti 334.903†	52134.1	3.152	mg/L	0.0446	6.305	mg/L	0.0893	1.42%
Tl 190.801†	-9.8	0.00359	mg/L	0.000533	0.00719	mg/L	0.001066	14.83%
V 292.402†	17184.1	0.1586	mg/L	0.00098	0.3171	mg/L	0.00197	0.62%
Zn 206.200†	1676.8	0.4894	mg/L	0.00415	0.9787	mg/L	0.00831	0.85%

Sequence No.: 23
Sample ID: CV 3

Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 11/27/2012 12:35:24 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2333586.5	105.5	%	0.78				0.74%
ScR 361.383	287417.7	104.6	%	1.47				1.41%
Ag 328.068†	154221.0	1.036	mg/L	0.0053	1.036	mg/L	0.0053	0.52%
Al 308.215†	2831.9	2.053	mg/L	0.0292	2.053	mg/L	0.0292	1.42%
As 188.979†	3182.9	2.070	mg/L	0.0170	2.070	mg/L	0.0170	0.82%
B 249.677†	6330.7	0.9665	mg/L	0.01195	0.9665	mg/L	0.01195	1.24%
Ba 233.527†	3973.0	1.004	mg/L	0.0164	1.004	mg/L	0.0164	1.63%
Be 313.042†	514271.1	0.9834	mg/L	0.02288	0.9834	mg/L	0.02288	2.33%
Ca 317.933†	23583.5	2.028	mg/L	0.0515	2.028	mg/L	0.0515	2.54%
Cd 228.802†	26220.5	1.027	mg/L	0.0045	1.027	mg/L	0.0045	0.43%
Co 228.616†	33848.9	1.008	mg/L	0.0039	1.008	mg/L	0.0039	0.39%
Cr 267.716†	5659.8	1.018	mg/L	0.0124	1.018	mg/L	0.0124	1.22%
Cu 324.752†	224015.3	1.018	mg/L	0.0071	1.018	mg/L	0.0071	0.69%
Fe 273.955†	2558.1	2.168	mg/L	0.0232	2.168	mg/L	0.0232	1.07%
K 766.490†	34177.1	20.15	mg/L	0.521	20.15	mg/L	0.521	2.59%
Mg 279.077†	2389.7	2.112	mg/L	0.0315	2.112	mg/L	0.0315	1.49%
Mn 257.610†	32221.2	0.9838	mg/L	0.02221	0.9838	mg/L	0.02221	2.26%
Mo 202.031†	17855.8	1.031	mg/L	0.0064	1.031	mg/L	0.0064	0.62%
Na 589.592†	492087.7	48.31	mg/L	1.188	48.31	mg/L	1.188	2.46%
Na 330.237†	1303.1	53.36	mg/L	0.717	53.36	mg/L	0.717	1.34%
Ni 231.604†	3651.8	0.9851	mg/L	0.01657	0.9851	mg/L	0.01657	1.68%
Pb 220.353†	14259.1	2.007	mg/L	0.0042	2.007	mg/L	0.0042	0.21%
Sb 206.836†	6192.6	2.184	mg/L	0.0149	2.184	mg/L	0.0149	0.68%
Se 196.026†	2611.8	2.027	mg/L	0.0088	2.027	mg/L	0.0088	0.43%
Si 288.158†	3718.5	2.243	mg/L	0.0336	2.243	mg/L	0.0336	1.50%
Sn 189.927†	3475.8	1.059	mg/L	0.0076	1.059	mg/L	0.0076	0.72%
Sr 421.552†	698206.5	0.9569	mg/L	0.02314	0.9569	mg/L	0.02314	2.42%
Ti 334.903†	18008.4	1.088	mg/L	0.0270	1.088	mg/L	0.0270	2.48%
Tl 190.801†	4316.9	2.012	mg/L	0.0118	2.012	mg/L	0.0118	0.58%
V 292.402†	107333.8	1.018	mg/L	0.0048	1.018	mg/L	0.0048	0.47%
Zn 206.200†	3552.5	1.037	mg/L	0.0144	1.037	mg/L	0.0144	1.39%

Sequence No.: 24
Sample ID: CB 3

Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 11/27/2012 12:40:28 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2326126.8	105.2	%	0.35				0.33%
ScR 361.383	285643.8	104.0	%	0.86				0.82%
Ag 328.068†	-11.7	-0.00008	mg/L	0.000065	-0.00008	mg/L	0.000065	82.54%
Al 308.215†	3.2	0.00231	mg/L	0.001989	0.00231	mg/L	0.001989	86.13%
As 188.979†	2.7	0.00174	mg/L	0.000982	0.00174	mg/L	0.000982	56.43%
B 249.677†	5.8	0.00088	mg/L	0.000784	0.00088	mg/L	0.000784	88.61%
Ba 233.527†	3.6	0.00091	mg/L	0.000266	0.00091	mg/L	0.000266	29.27%
Be 313.042†	23.4	0.00004	mg/L	0.000043	0.00004	mg/L	0.000043	95.64%
Ca 317.933†	7.3	0.00063	mg/L	0.001253	0.00063	mg/L	0.001253	200.20%
Cd 228.802†	-0.3	-0.00002	mg/L	0.000189	-0.00002	mg/L	0.000189	827.74%
Co 228.616†	2.1	0.00006	mg/L	0.000117	0.00006	mg/L	0.000117	186.71%
Cr 267.716†	3.6	0.00065	mg/L	0.000759	0.00065	mg/L	0.000759	117.37%
Cu 324.752†	-138.2	-0.00063	mg/L	0.000136	-0.00063	mg/L	0.000136	21.65%
Fe 273.955†	2.9	0.00242	mg/L	0.001470	0.00242	mg/L	0.001470	60.65%
K 766.490†	-28.7	-0.01693	mg/L	0.013636	-0.01693	mg/L	0.013636	80.56%
Mg 279.077†	-2.9	-0.00258	mg/L	0.006385	-0.00258	mg/L	0.006385	247.92%
Mn 257.610†	5.7	0.00017	mg/L	0.000030	0.00017	mg/L	0.000030	17.49%
Mo 202.031†	12.4	0.00071	mg/L	0.000214	0.00071	mg/L	0.000214	30.00%
Na 589.592†	30.9	0.00303	mg/L	0.005370	0.00303	mg/L	0.005370	177.30%
Na 330.237†	2.7	0.1100	mg/L	0.22306	0.1100	mg/L	0.22306	202.75%
Ni 231.604†	5.2	0.00139	mg/L	0.001312	0.00139	mg/L	0.001312	94.16%
Pb 220.353†	4.3	0.00061	mg/L	0.000634	0.00061	mg/L	0.000634	104.07%
Sb 206.836†	6.4	0.00225	mg/L	0.001474	0.00225	mg/L	0.001474	65.49%
Se 196.026†	-7.8	-0.00603	mg/L	0.003677	-0.00603	mg/L	0.003677	60.94%
Si 288.158†	1.8	0.00110	mg/L	0.003970	0.00110	mg/L	0.003970	360.95%
Sn 189.927†	3.8	0.00116	mg/L	0.000308	0.00116	mg/L	0.000308	26.54%
Sr 421.552†	83.9	0.00012	mg/L	0.000035	0.00012	mg/L	0.000035	30.10%
Ti 334.903†	3.7	0.00022	mg/L	0.001865	0.00022	mg/L	0.001865	830.48%
Tl 190.801†	7.6	0.00357	mg/L	0.000719	0.00357	mg/L	0.000719	20.14%
V 292.402†	14.1	0.00014	mg/L	0.000228	0.00014	mg/L	0.000228	167.95%
Zn 206.200†	1.3	0.00037	mg/L	0.000110	0.00037	mg/L	0.000110	29.51%

Sequence No.: 25
Sample ID: VR82 F SWC

Dilution: 2.000000X

Del

Autosampler Location: 324
Date Collected: 11/27/2012 12:44:42 PM
Data Type: Original

Nebulizer Parameters: VR82 F SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR82 F SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2391278.6	108.2	%	0.48				0.45%
ScR 361.383	294393.7	107.2	%	3.78				3.53%
Ag 328.068†	-86.3	-0.00053	mg/L	0.000177	-0.00106	mg/L	0.000354	33.29%
Al 308.215†	68483.7	50.47	mg/L	2.217	100.9	mg/L	4.43	4.39%
As 188.979†	-89.8	0.02925	mg/L	0.003557	0.05850	mg/L	0.007114	12.16%
B 249.677†	74.8	0.01135	mg/L	0.001007	0.02270	mg/L	0.002014	8.87%
Ba 233.527†	1360.8	0.3307	mg/L	0.01193	0.6614	mg/L	0.02386	3.61%
Be 313.042†	461.8	0.00081	mg/L	0.000062	0.00163	mg/L	0.000123	7.58%
Ca 317.933†	249940.0	21.49	mg/L	0.950	42.99	mg/L	1.900	4.42%
Cd 228.802†	52.1	0.00179	mg/L	0.000083	0.00358	mg/L	0.000166	4.64%
Co 228.616†	1441.2	0.03595	mg/L	0.000267	0.07191	mg/L	0.000534	0.74%
Cr 267.716†	800.8	0.1450	mg/L	0.00409	0.2900	mg/L	0.00817	2.82%
Cu 324.752†	21642.5	0.1012	mg/L	0.00051	0.2024	mg/L	0.00102	0.50%
Fe 273.955†	96177.2	81.78	mg/L	3.551	163.6	mg/L	7.10	4.34%
K 766.490†	4300.3	2.535	mg/L	0.1332	5.071	mg/L	0.2664	5.25%
Mg 279.077†	24138.1	21.22	mg/L	0.754	42.44	mg/L	1.508	3.55%
Mn 257.610†	63345.6	1.934	mg/L	0.0864	3.867	mg/L	0.1727	4.47%
Mo 202.031†	55.5	0.00296	mg/L	0.000313	0.00593	mg/L	0.000625	10.55%
Na 589.592†	9715.6	0.9539	mg/L	0.03603	1.908	mg/L	0.0721	3.78%
Na 330.237†	12.4	1.067	mg/L	0.1562	2.134	mg/L	0.3123	14.64%
Ni 231.604†	519.0	0.1400	mg/L	0.00368	0.2800	mg/L	0.00737	2.63%
Pb 220.353†	463.3	0.07403	mg/L	0.000054	0.1481	mg/L	0.00011	0.07%
Sb 206.836†	12.0	0.00411	mg/L	0.000563	0.00822	mg/L	0.001125	13.68%
Se 196.026†	0.5	0.00029	mg/L	0.003416	0.00057	mg/L	0.006831	>999.9%
Si 288.158†	12567.8	7.587	mg/L	0.2692	15.17	mg/L	0.538	3.55%
Sn 189.927†	-15.2	-0.00152	mg/L	0.001564	-0.00305	mg/L	0.003127	102.63%
Sr 421.552†	98433.0	0.1349	mg/L	0.00581	0.2698	mg/L	0.01162	4.31%
Ti 334.903†	51011.5	3.084	mg/L	0.1357	6.169	mg/L	0.2713	4.40%
Tl 190.801†	-6.6	0.00482	mg/L	0.000988	0.00964	mg/L	0.001976	20.50%
V 292.402†	17357.8	0.1602	mg/L	0.00087	0.3204	mg/L	0.00175	0.55%
Zn 206.200†	1491.7	0.4353	mg/L	0.01623	0.8707	mg/L	0.03247	3.73%

Sequence No.: 26
Sample ID: VR82 G SWC

Dilution: 2.000000X

Del

Autosampler Location: 325
Date Collected: 11/27/2012 12:48:42 PM
Data Type: Original

Nebulizer Parameters: VR82 G SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VR82 G SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2335922.2	105.7	%	0.59				0.56%
ScR 361.383	292039.2	106.3	%	1.93				1.81%
Ag 328.068†	-62.2	-0.00037	mg/L	0.000186	-0.00073	mg/L	0.000371	50.56%
Al 308.215†	73400.5	54.10	mg/L	1.217	108.2	mg/L	2.43	2.25%
As 188.979†	-98.3	0.02764	mg/L	0.004839	0.05527	mg/L	0.009677	17.51%
B 249.677†	75.6	0.01146	mg/L	0.000636	0.02293	mg/L	0.001271	5.54%
Ba 233.527†	1473.9	0.3587	mg/L	0.00507	0.7174	mg/L	0.01014	1.41%
Be 313.042†	506.1	0.00089	mg/L	0.000041	0.00179	mg/L	0.000082	4.57%
Ca 317.933†	252841.3	21.74	mg/L	0.522	43.49	mg/L	1.045	2.40%
Cd 228.802†	60.8	0.00215	mg/L	0.000205	0.00429	mg/L	0.000410	9.54%
Co 228.616†	1524.4	0.03813	mg/L	0.000685	0.07626	mg/L	0.001370	1.80%
Cr 267.716†	882.2	0.1596	mg/L	0.00302	0.3193	mg/L	0.00604	1.89%
Cu 324.752†	21703.6	0.1016	mg/L	0.00061	0.2032	mg/L	0.00122	0.60%
Fe 273.955†	100298.5	85.28	mg/L	2.182	170.6	mg/L	4.36	2.56%
K 766.490†	4601.5	2.713	mg/L	0.0709	5.426	mg/L	0.1418	2.61%
Mg 279.077†	25942.0	22.81	mg/L	0.440	45.62	mg/L	0.880	1.93%
Mn 257.610†	64506.2	1.969	mg/L	0.0462	3.938	mg/L	0.0923	2.34%
Mo 202.031†	53.6	0.00285	mg/L	0.000347	0.00570	mg/L	0.000694	12.18%
Na 589.592†	10077.3	0.9894	mg/L	0.01800	1.979	mg/L	0.0360	1.82%
Na 330.237†	9.9	0.9941	mg/L	0.24020	1.988	mg/L	0.4804	24.16%
Ni 231.604†	550.1	0.1484	mg/L	0.00369	0.2967	mg/L	0.00738	2.49%
Pb 220.353†	462.6	0.07468	mg/L	0.000422	0.1494	mg/L	0.00084	0.56%
Sb 206.836†	10.8	0.00357	mg/L	0.002177	0.00714	mg/L	0.004354	60.95%
Se 196.026†	3.9	0.00289	mg/L	0.001297	0.00578	mg/L	0.002593	44.86%
Si 288.158†	12600.8	7.607	mg/L	0.1365	15.21	mg/L	0.273	1.80%
Sn 189.927†	-19.1	-0.00264	mg/L	0.001729	-0.00529	mg/L	0.003458	65.41%
Sr 421.552†	101608.0	0.1393	mg/L	0.00300	0.2785	mg/L	0.00600	2.15%
Ti 334.903†	53250.0	3.220	mg/L	0.0748	6.440	mg/L	0.1497	2.32%
Tl 190.801†	-9.2	0.00388	mg/L	0.002385	0.00776	mg/L	0.004769	61.48%
V 292.402†	18616.6	0.1720	mg/L	0.00115	0.3439	mg/L	0.00231	0.67%
Zn 206.200†	1512.3	0.4413	mg/L	0.00822	0.8827	mg/L	0.01644	1.86%

Sequence No.: 27
Sample ID: VR82 H SWC

Dilution: 2.000000X

Autosampler Location: 326
Date Collected: 11/27/2012 12:52:41 PM
Data Type: Original

Nebulizer Parameters: VR82 H SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR82 H SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2337058.6	105.7	%	0.17				0.16%
ScR 361.383	290799.7	105.9	%	0.83				0.78%
Ag 328.068†	-69.5	-0.00041	mg/L	0.000320	-0.00082	mg/L	0.000640	78.24%
Al 308.215†	89294.4	65.81	mg/L	0.968	131.6	mg/L	1.94	1.47%
As 188.979†	-124.5	0.03025	mg/L	0.003133	0.06050	mg/L	0.006266	10.36%
B 249.677†	88.9	0.01348	mg/L	0.000753	0.02697	mg/L	0.001506	5.58%
Ba 233.527†	1612.3	0.3915	mg/L	0.00324	0.7831	mg/L	0.00647	0.83%
Be 313.042†	578.5	0.00102	mg/L	0.000004	0.00204	mg/L	0.000008	0.38%
Ca 317.933†	271388.7	23.34	mg/L	0.351	46.68	mg/L	0.703	1.51%
Cd 228.802†	70.4	0.00253	mg/L	0.000067	0.00507	mg/L	0.000134	2.64%
Co 228.616†	1707.4	0.04209	mg/L	0.000135	0.08418	mg/L	0.000270	0.32%
Cr 267.716†	1054.0	0.1907	mg/L	0.00072	0.3814	mg/L	0.00143	0.38%
Cu 324.752†	25046.8	0.1172	mg/L	0.00041	0.2344	mg/L	0.00082	0.35%
Fe 273.955†	115886.4	98.54	mg/L	1.501	197.1	mg/L	3.00	1.52%
K 766.490†	5339.0	3.148	mg/L	0.0452	6.295	mg/L	0.0904	1.44%
Mg 279.077†	30279.0	26.62	mg/L	0.227	53.24	mg/L	0.455	0.85%
Mn 257.610†	67857.8	2.071	mg/L	0.0322	4.143	mg/L	0.0644	1.55%
Mo 202.031†	63.0	0.00338	mg/L	0.000295	0.00675	mg/L	0.000591	8.75%
Na 589.592†	12176.1	1.195	mg/L	0.0174	2.391	mg/L	0.0348	1.46%
Na 330.237†	8.8	1.089	mg/L	0.1591	2.177	mg/L	0.3182	14.61%
Ni 231.604†	633.6	0.1709	mg/L	0.00072	0.3417	mg/L	0.00145	0.42%
Pb 220.353†	569.7	0.09205	mg/L	0.001612	0.1841	mg/L	0.00322	1.75%
Sb 206.836†	13.4	0.00441	mg/L	0.003088	0.00882	mg/L	0.006176	70.05%
Se 196.026†	-3.2	-0.00260	mg/L	0.004337	-0.00520	mg/L	0.008674	166.89%
Si 288.158†	13838.7	8.354	mg/L	0.0726	16.71	mg/L	0.145	0.87%
Sn 189.927†	-27.2	-0.00481	mg/L	0.001021	-0.00962	mg/L	0.002041	21.23%
Sr 421.552†	107591.6	0.1475	mg/L	0.00198	0.2949	mg/L	0.00397	1.34%
Ti 334.903†	64583.4	3.905	mg/L	0.0600	7.811	mg/L	0.1200	1.54%
Tl 190.801†	-12.3	0.00372	mg/L	0.000308	0.00745	mg/L	0.000615	8.26%
V 292.402†	21304.0	0.1966	mg/L	0.00074	0.3932	mg/L	0.00147	0.37%
Zn 206.200†	1674.8	0.4888	mg/L	0.00410	0.9776	mg/L	0.00821	0.84%

Sequence No.: 28
Sample ID: VR82 I SWC

Del

Dilution: 2.000000X

Autosampler Location: 327
Date Collected: 11/27/2012 12:56:40 PM
Data Type: Original

Nebulizer Parameters: VR82 I SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VR82 I SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2335660.1	105.6	%	0.52				0.50%
ScR 361.383	287700.9	104.7	%	0.52				0.49%
Ag 328.068†	-62.5	-0.00037	mg/L	0.000291	-0.00074	mg/L	0.000582	78.88%
Al 308.215†	79115.5	58.31	mg/L	0.171	116.6	mg/L	0.34	0.29%
As 188.979†	-111.7	0.02660	mg/L	0.002995	0.05319	mg/L	0.005990	11.26%
B 249.677†	68.6	0.01040	mg/L	0.001272	0.02080	mg/L	0.002545	12.23%
Ba 233.527†	1459.2	0.3547	mg/L	0.00177	0.7094	mg/L	0.00354	0.50%
Be 313.042†	526.3	0.00093	mg/L	0.000030	0.00186	mg/L	0.000060	3.25%
Ca 317.933†	253064.4	21.76	mg/L	0.126	43.53	mg/L	0.253	0.58%
Cd 228.802†	61.7	0.00222	mg/L	0.000094	0.00445	mg/L	0.000188	4.23%
Co 228.616†	1444.5	0.03521	mg/L	0.000281	0.07041	mg/L	0.000561	0.80%
Cr 267.716†	948.2	0.1716	mg/L	0.00140	0.3432	mg/L	0.00279	0.81%
Cu 324.752†	22584.8	0.1056	mg/L	0.00034	0.2112	mg/L	0.00068	0.32%
Fe 273.955†	102386.4	87.06	mg/L	0.474	174.1	mg/L	0.95	0.54%
K 766.490†	4948.2	2.917	mg/L	0.0270	5.835	mg/L	0.0540	0.93%
Mg 279.077†	26309.8	23.13	mg/L	0.243	46.26	mg/L	0.485	1.05%
Mn 257.610†	58600.1	1.789	mg/L	0.0083	3.578	mg/L	0.0166	0.46%
Mo 202.031†	55.7	0.00297	mg/L	0.000403	0.00594	mg/L	0.000807	13.57%
Na 589.592†	10744.2	1.055	mg/L	0.0024	2.110	mg/L	0.0047	0.22%
Na 330.237†	10.2	1.062	mg/L	0.2744	2.124	mg/L	0.5487	25.84%
Ni 231.604†	549.9	0.1483	mg/L	0.00264	0.2966	mg/L	0.00528	1.78%
Pb 220.353†	524.3	0.08431	mg/L	0.000320	0.1686	mg/L	0.00064	0.38%
Sb 206.836†	4.3	0.00120	mg/L	0.000972	0.00240	mg/L	0.001944	80.95%
Se 196.026†	5.4	0.00409	mg/L	0.003098	0.00819	mg/L	0.006197	75.69%
Si 288.158†	14013.2	8.459	mg/L	0.0826	16.92	mg/L	0.165	0.98%
Sn 189.927†	-24.9	-0.00437	mg/L	0.002583	-0.00874	mg/L	0.005166	59.08%
Sr 421.552†	99156.5	0.1359	mg/L	0.00039	0.2718	mg/L	0.00078	0.29%
Ti 334.903†	57646.9	3.486	mg/L	0.0145	6.972	mg/L	0.0290	0.42%
Tl 190.801†	-10.0	0.00372	mg/L	0.002943	0.00743	mg/L	0.005887	79.20%
V 292.402†	18837.9	0.1739	mg/L	0.00012	0.3477	mg/L	0.00023	0.07%
Zn 206.200†	1567.9	0.4576	mg/L	0.00453	0.9151	mg/L	0.00906	0.99%

Sequence No.: 29
Sample ID: CV 4

Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 11/27/2012 1:00:39 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2275044.8	102.9	%	0.79				0.77%
ScR 361.383	278400.2	101.4	%	1.32				1.30%
Ag 328.068†	158241.3	1.063	mg/L	0.0067	1.063	mg/L	0.0067	0.63%
Al 308.215†	2956.0	2.143	mg/L	0.0269	2.143	mg/L	0.0269	1.25%
As 188.979†	3266.2	2.125	mg/L	0.0082	2.125	mg/L	0.0082	0.38%
B 249.677†	6586.4	1.006	mg/L	0.0140	1.006	mg/L	0.0140	1.39%
Ba 233.527†	4122.5	1.042	mg/L	0.0141	1.042	mg/L	0.0141	1.35%
Be 313.042†	527548.6	1.009	mg/L	0.0150	1.009	mg/L	0.0150	1.49%
Ca 317.933†	24470.1	2.104	mg/L	0.0317	2.104	mg/L	0.0317	1.51%
Cd 228.802†	26917.2	1.055	mg/L	0.0091	1.055	mg/L	0.0091	0.86%
Co 228.616†	34648.6	1.032	mg/L	0.0095	1.032	mg/L	0.0095	0.92%
Cr 267.716†	5872.5	1.056	mg/L	0.0142	1.056	mg/L	0.0142	1.35%
Cu 324.752†	230766.8	1.049	mg/L	0.0071	1.049	mg/L	0.0071	0.68%
Fe 273.955†	2652.9	2.249	mg/L	0.0284	2.249	mg/L	0.0284	1.26%
K 766.490†	35715.5	21.06	mg/L	0.234	21.06	mg/L	0.234	1.11%
Mg 279.077†	2474.5	2.187	mg/L	0.0317	2.187	mg/L	0.0317	1.45%
Mn 257.610†	33447.1	1.021	mg/L	0.0129	1.021	mg/L	0.0129	1.26%
Mo 202.031†	18276.3	1.055	mg/L	0.0101	1.055	mg/L	0.0101	0.96%
Na 589.592†	514232.0	50.49	mg/L	0.811	50.49	mg/L	0.811	1.61%
Na 330.237†	1346.6	55.14	mg/L	0.829	55.14	mg/L	0.829	1.50%
Ni 231.604†	3790.5	1.023	mg/L	0.0140	1.023	mg/L	0.0140	1.37%
Pb 220.353†	14600.0	2.055	mg/L	0.0186	2.055	mg/L	0.0186	0.90%
Sb 206.836†	6376.4	2.249	mg/L	0.0127	2.249	mg/L	0.0127	0.57%
Se 196.026†	2669.4	2.072	mg/L	0.0162	2.072	mg/L	0.0162	0.78%
Si 288.158†	3857.8	2.327	mg/L	0.0321	2.327	mg/L	0.0321	1.38%
Sn 189.927†	3557.0	1.084	mg/L	0.0081	1.084	mg/L	0.0081	0.75%
Sr 421.552†	729571.3	0.9999	mg/L	0.01459	0.9999	mg/L	0.01459	1.46%
Ti 334.903†	18699.2	1.130	mg/L	0.0158	1.130	mg/L	0.0158	1.39%
Tl 190.801†	4426.7	2.063	mg/L	0.0100	2.063	mg/L	0.0100	0.49%
V 292.402†	110019.5	1.043	mg/L	0.0066	1.043	mg/L	0.0066	0.63%
Zn 206.200†	3657.3	1.067	mg/L	0.0156	1.067	mg/L	0.0156	1.46%

User canceled analysis.

==========

Analysis Begun

Start Time: 11/27/2012 1:06:04 PM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 11/27/2012 8:08:35 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\1127.sif
Batch ID:
Results Data Set: I2121127
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

==========

Sequence No.: 1
Sample ID: VR58 MB1 SWC

Autosampler Location: 304
Date Collected: 11/27/2012 1:06:05 PM
Data Type: Original

Dilution: 2.000000X
User canceled analysis.

11-29-12

Analysis Begun

Start Time: 11/27/2012 1:07:01 PM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 11/27/2012 8:08:35 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\1127.sif
Batch ID:
Results Data Set: I2121127
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: CV
Autosampler Location: 7
Date Collected: 11/27/2012 1:07:08 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2282680.6	103.2	%	0.07				0.07%
ScR 361.383	281374.2	102.4	%	1.92				1.87%
Ag 328.068†	157748.0	1.060	mg/L	0.0020	1.060	mg/L	0.0020	0.19%
Al 308.215†	2913.6	2.112	mg/L	0.0420	2.112	mg/L	0.0420	1.99%
As 188.979†	3259.1	2.120	mg/L	0.0085	2.120	mg/L	0.0085	0.40%
B 249.677†	6524.1	0.9960	mg/L	0.01742	0.9960	mg/L	0.01742	1.75%
Ba 233.527†	4082.4	1.032	mg/L	0.0157	1.032	mg/L	0.0157	1.52%
Be 313.042†	529818.7	1.013	mg/L	0.0199	1.013	mg/L	0.0199	1.96%
Ca 317.933†	24257.6	2.086	mg/L	0.0384	2.086	mg/L	0.0384	1.84%
Cd 228.802†	26920.0	1.055	mg/L	0.0023	1.055	mg/L	0.0023	0.22%
Co 228.616†	34680.4	1.033	mg/L	0.0051	1.033	mg/L	0.0051	0.49%
Cr 267.716†	5822.8	1.047	mg/L	0.0165	1.047	mg/L	0.0165	1.57%
Cu 324.752†	229827.7	1.044	mg/L	0.0026	1.044	mg/L	0.0026	0.25%
Fe 273.955†	2621.3	2.222	mg/L	0.0385	2.222	mg/L	0.0385	1.73%
K 766.490†	35224.3	20.77	mg/L	0.470	20.77	mg/L	0.470	2.26%
Mg 279.077†	2447.7	2.164	mg/L	0.0403	2.164	mg/L	0.0403	1.86%
Mn 257.610†	33165.5	1.013	mg/L	0.0207	1.013	mg/L	0.0207	2.04%
Mo 202.031†	18312.9	1.058	mg/L	0.0031	1.058	mg/L	0.0031	0.30%
Na 589.592†	505727.6	49.65	mg/L	0.996	49.65	mg/L	0.996	2.01%
Na 330.237†	1339.3	54.84	mg/L	0.866	54.84	mg/L	0.866	1.58%
Ni 231.604†	3745.0	1.010	mg/L	0.0150	1.010	mg/L	0.0150	1.49%
Pb 220.353†	14581.4	2.053	mg/L	0.0062	2.053	mg/L	0.0062	0.30%
Sb 206.836†	6347.9	2.239	mg/L	0.0076	2.239	mg/L	0.0076	0.34%
Se 196.026†	2670.3	2.073	mg/L	0.0082	2.073	mg/L	0.0082	0.40%
Si 288.158†	3813.2	2.300	mg/L	0.0479	2.300	mg/L	0.0479	2.08%
Sn 189.927†	3552.7	1.082	mg/L	0.0043	1.082	mg/L	0.0043	0.39%
Sr 421.552†	718434.7	0.9846	mg/L	0.01874	0.9846	mg/L	0.01874	1.90%
Ti 334.903†	18518.3	1.119	mg/L	0.0214	1.119	mg/L	0.0214	1.91%
Tl 190.801†	4422.9	2.061	mg/L	0.0054	2.061	mg/L	0.0054	0.26%
V 292.402†	109790.9	1.041	mg/L	0.0029	1.041	mg/L	0.0029	0.27%
Zn 206.200†	3640.9	1.062	mg/L	0.0201	1.062	mg/L	0.0201	1.89%

Sequence No.: 2
Sample ID: CB 4

Autosampler Location: 1
Date Collected: 11/27/2012 1:12:17 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2301991.2	104.1	%	0.23				0.22%
ScR 361.383	282876.7	103.0	%	0.71				0.69%
Ag 328.068†	26.5	0.00018	mg/L	0.000171	0.00018	mg/L	0.000171	95.88%
Al 308.215†	-1.0	-0.00078	mg/L	0.002136	-0.00078	mg/L	0.002136	273.60%
As 188.979†	-0.9	-0.00055	mg/L	0.001588	-0.00055	mg/L	0.001588	287.12%
B 249.677†	9.4	0.00143	mg/L	0.000853	0.00143	mg/L	0.000853	59.58%
Ba 233.527†	-1.0	-0.00025	mg/L	0.000592	-0.00025	mg/L	0.000592	235.91%
Be 313.042†	29.3	0.00006	mg/L	0.000059	0.00006	mg/L	0.000059	105.42%
Ca 317.933†	-0.1	-0.00001	mg/L	0.000303	-0.00001	mg/L	0.000303	>999.9%
Cd 228.802†	1.8	0.00008	mg/L	0.000113	0.00008	mg/L	0.000113	148.72%
Co 228.616†	2.0	0.00006	mg/L	0.000204	0.00006	mg/L	0.000204	355.32%
Cr 267.716†	1.1	0.00019	mg/L	0.000539	0.00019	mg/L	0.000539	279.64%
Cu 324.752†	-140.0	-0.00064	mg/L	0.000056	-0.00064	mg/L	0.000056	8.79%
Fe 273.955†	0.5	0.00046	mg/L	0.001731	0.00046	mg/L	0.001731	378.16%
K 766.490†	-28.2	-0.01660	mg/L	0.011198	-0.01660	mg/L	0.011198	67.45%
Mg 279.077†	4.0	0.00351	mg/L	0.010039	0.00351	mg/L	0.010039	285.92%
Mn 257.610†	10.8	0.00033	mg/L	0.000127	0.00033	mg/L	0.000127	38.36%
Mo 202.031†	15.1	0.00087	mg/L	0.000211	0.00087	mg/L	0.000211	24.17%
Na 589.592†	19.7	0.00193	mg/L	0.001653	0.00193	mg/L	0.001653	85.50%
Na 330.237†	-1.2	-0.05058	mg/L	0.701219	-0.05058	mg/L	0.701219	>999.9%
Ni 231.604†	0.3	0.00008	mg/L	0.000523	0.00008	mg/L	0.000523	643.31%
Pb 220.353†	11.8	0.00165	mg/L	0.000783	0.00165	mg/L	0.000783	47.33%
Sb 206.836†	8.8	0.00309	mg/L	0.001170	0.00309	mg/L	0.001170	37.82%
Se 196.026†	-4.1	-0.00320	mg/L	0.003559	-0.00320	mg/L	0.003559	111.18%
Si 288.158†	6.9	0.00419	mg/L	0.002748	0.00419	mg/L	0.002748	65.55%
Sn 189.927†	1.3	0.00039	mg/L	0.000648	0.00039	mg/L	0.000648	166.51%
Sr 421.552†	72.8	0.00010	mg/L	0.000033	0.00010	mg/L	0.000033	32.93%
Ti 334.903†	7.2	0.00044	mg/L	0.000296	0.00044	mg/L	0.000296	67.77%
Tl 190.801†	4.1	0.00194	mg/L	0.001633	0.00194	mg/L	0.001633	84.38%
V 292.402†	1.9	0.00002	mg/L	0.000178	0.00002	mg/L	0.000178	935.27%
Zn 206.200†	2.0	0.00059	mg/L	0.000588	0.00059	mg/L	0.000588	98.95%

Analysis Begun

Start Time: 11/27/2012 1:22:48 PM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 11/27/2012 8:08:35 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\1127.sif
Batch ID:
Results Data Set: I2121127
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: STD4
Date Collected: 11/27/2012 1:22:49 PM
Data Type: Original

Nebulizer Parameters: STD4

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: STD4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2349239.7	14580.43	0.62%	106.3	%
ScR 361.383	289414.2	2164.64	0.75%	105.4	%
Mo 202.031†	175855.3	1839.47	1.05%	[10]	mg/L
Sb 206.836†	28628.7	298.50	1.04%	[10]	mg/L
Si 288.158†	17434.8	167.10	0.96%	[10]	mg/L
Sn 189.927†	33909.1	301.80	0.89%	[10]	mg/L
Tl 334.903†	175643.1	203.15	0.12%	[10]	mg/L

Sequence No.: 2
Sample ID: STD5

Date Collected: 11/27/2012 1:25:04 PM
Data Type: Original

Nebulizer Parameters: STD5

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: STD5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2158212.8	19942.70	0.92%	97.62	%
ScR 361.383	282290.3	2473.21	0.88%	102.8	%
Al 308.215†	41737.6	538.25	1.29%	[30]	mg/L
Ca 317.933†	365386.7	4892.01	1.34%	[30]	mg/L
Fe 273.955†	124443.3	1759.60	1.41%	[100]	mg/L
K 766.490†	174123.8	983.83	0.57%	[100]	mg/L
Mg 279.077†	35484.4	439.16	1.24%	[30]	mg/L
Na 330.237†	2498.7	30.72	1.23%	[100]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	148900	0.00000	1.000000	
Al 308.215	1	Lin Thru 0	0.0	1391	0.00000	1.000000	
As 188.979	1	Lin Thru 0	0.0	1558	0.00000	1.000000	
B 249.677	1	Lin Thru 0	0.0	6544	0.00000	1.000000	
Ba 233.527	1	Lin Thru 0	0.0	3955	0.00000	1.000000	
Be 313.042	1	Lin Thru 0	0.0	522800	0.00000	1.000000	
Ca 317.933	1	Lin Thru 0	0.0	12180	0.00000	1.000000	
Cd 228.802	1	Lin Thru 0	0.0	25210	0.00000	1.000000	
Co 228.616	1	Lin Thru 0	0.0	33490	0.00000	1.000000	
Cr 267.716	1	Lin Thru 0	0.0	5559	0.00000	1.000000	
Cu 324.752	1	Lin Thru 0	0.0	220000	0.00000	1.000000	
Fe 273.955	1	Lin Thru 0	0.0	1244	0.00000	1.000000	
K 766.490	1	Lin Thru 0	0.0	1741	0.00000	1.000000	
Mg 279.077	1	Lin Thru 0	0.0	1183	0.00000	1.000000	
Mn 257.610	1	Lin Thru 0	0.0	32760	0.00000	1.000000	
Mo 202.031	1	Lin Thru 0	0.0	17590	0.00000	1.000000	
Na 589.592	1	Lin Thru 0	0.0	10190	0.00000	1.000000	
Na 330.237	1	Lin Thru 0	0.0	24.99	0.00000	1.000000	
Ni 231.604	1	Lin Thru 0	0.0	3708	0.00000	1.000000	
Pb 220.353	1	Lin Thru 0	0.0	7107	0.00000	1.000000	
Sb 206.836	1	Lin Thru 0	0.0	2863	0.00000	1.000000	
Se 196.026	1	Lin Thru 0	0.0	1288	0.00000	1.000000	
Si 288.158	1	Lin Thru 0	0.0	1743	0.00000	1.000000	
Sn 189.927	1	Lin Thru 0	0.0	3391	0.00000	1.000000	
Sr 421.552	1	Lin Thru 0	0.0	729700	0.00000	1.000000	
Ti 334.903	1	Lin Thru 0	0.0	17560	0.00000	1.000000	
Tl 190.801	1	Lin Thru 0	0.0	2137	0.00000	1.000000	
V 292.402	1	Lin Thru 0	0.0	105900	0.00000	1.000000	
Zn 206.200	1	Lin Thru 0	0.0	3426	0.00000	1.000000	

Analysis Begun

Start Time: 11/27/2012 1:29:03 PM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 11/27/2012 8:08:35 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\1127.sif
Batch ID:
Results Data Set: I2121127
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: CV 6

Autosampler Location: 7
Date Collected: 11/27/2012 1:29:04 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2266619.2	102.5	%	0.23				0.23%
ScR 361.383	281223.5	102.4	%	1.47				1.44%
Ag 328.068†	151922.0	1.021	mg/L	0.0023	1.021	mg/L	0.0023	0.22%
Al 308.215†	2905.6	2.053	mg/L	0.0324	2.053	mg/L	0.0324	1.58%
As 188.979†	3258.5	2.118	mg/L	0.0109	2.118	mg/L	0.0109	0.52%
B 249.677†	6498.2	0.9921	mg/L	0.01422	0.9921	mg/L	0.01422	1.43%
Ba 233.527†	4064.2	1.027	mg/L	0.0159	1.027	mg/L	0.0159	1.55%
Be 313.042†	529899.8	1.013	mg/L	0.0165	1.013	mg/L	0.0165	1.63%
Ca 317.933†	24234.7	1.990	mg/L	0.0367	1.990	mg/L	0.0367	1.84%
Cd 228.802†	26806.1	1.050	mg/L	0.0008	1.050	mg/L	0.0008	0.08%
Co 228.616†	34492.8	1.028	mg/L	0.0005	1.028	mg/L	0.0005	0.05%
Cr 267.716†	5807.5	1.044	mg/L	0.0108	1.044	mg/L	0.0108	1.03%
Cu 324.752†	223774.1	1.017	mg/L	0.0017	1.017	mg/L	0.0017	0.17%
Fe 273.955†	2625.3	2.103	mg/L	0.0171	2.103	mg/L	0.0171	0 81%
K 766.490†	35304.2	20.28	mg/L	0.329	20.28	mg/L	0.329	1.62%
Mg 279.077†	2448.5	2.078	mg/L	0.0328	2.078	mg/L	0.0328	1.58%
Mn 257.610†	33163.4	1.013	mg/L	0.0171	1.013	mg/L	0.0171	1.69%
Mo 202.031†	18780.0	1.068	mg/L	0.0045	1.068	mg/L	0.0045	0.42%
Na 589.592†	505745.6	49.65	mg/L	0.792	49.65	mg/L	0.792	1.60%
Na 330.237†	1329.3	53.09	mg/L	0.734	53.09	mg/L	0.734	1.38%
Ni 231.604†	3739.9	1.009	mg/L	0.0140	1.009	mg/L	0.0140	1.39%
Pb 220.353†	14974.1	2.108	mg/L	0.0088	2.108	mg/L	0.0088	0.42%
Sb 206.836†	6342.0	2.214	mg/L	0.0143	2.214	mg/L	0.0143	0.65%
Se 196.026†	2669.3	2.072	mg/L	0.0111	2.072	mg/L	0.0111	0.53%
Si 288.158†	3803.3	2.181	mg/L	0.0303	2.181	mg/L	0.0303	1.39%
Sn 189.927†	3563.4	1.052	mg/L	0.0043	1.052	mg/L	0.0043	0.40%
Sr 421.552†	719114.2	0.9855	mg/L	0.01762	0.9855	mg/L	0.01762	1.79%
Ti 334.903†	18521.6	1.053	mg/L	0.0175	1.053	mg/L	0.0175	1.66%
Tl 190.801†	4416.9	2.058	mg/L	0.0089	2.058	mg/L	0.0089	0.43%
V 292.402†	107379.0	1.018	mg/L	0.0017	1.018	mg/L	0.0017	0.17%
Zn 206.200†	3636.5	1.061	mg/L	0.0125	1.061	mg/L	0.0125	1.17%

Sequence No.: 2
Sample ID: CB 5

Autosampler Location: 1
Date Collected: 11/27/2012 1:33:54 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2269541.6	102.7	%	0.67				0.66%
ScR 361.383	279335.7	101.7	%	0.31				0.30%
Ag 328.068†	-24.4	-0.00016	mg/L	0.000295	-0.00016	mg/L	0.000295	179.78%
Al 308.215†	-0.9	-0.00064	mg/L	0.000756	-0.00064	mg/L	0.000756	118.55%
As 188.979†	-0.0	-0.00003	mg/L	0.001799	-0.00003	mg/L	0.001799	>999.9%
B 249.677†	8.8	0.00135	mg/L	0.000612	0.00135	mg/L	0.000612	45.17%
Ba 233.527†	2.6	0.00066	mg/L	0.000813	0.00066	mg/L	0.000813	122.28%
Be 313.042†	51.1	0.00010	mg/L	0.000036	0.00010	mg/L	0.000036	37.35%
Ca 317.933†	12.0	0.00098	mg/L	0.000420	0.00098	mg/L	0.000420	42.64%
Cd 228.802†	1.8	0.00007	mg/L	0.000229	0.00007	mg/L	0.000229	313.35%
Co 228.616†	-4.6	-0.00014	mg/L	0.000128	-0.00014	mg/L	0.000128	92.91%
Cr 267.716†	1.5	0.00027	mg/L	0.000157	0.00027	mg/L	0.000157	58.41%
Cu 324.752†	-103.6	-0.00047	mg/L	0.000068	-0.00047	mg/L	0.000068	14.34%
Fe 273.955†	-0.7	-0.00055	mg/L	0.001363	-0.00055	mg/L	0.001363	249.64%
K 766.490†	-7.2	-0.00411	mg/L	0.000223	-0.00411	mg/L	0.000223	5.43%
Mg 279.077†	5.6	0.00470	mg/L	0.001212	0.00470	mg/L	0.001212	25.78%
Mn 257.610†	8.2	0.00025	mg/L	0.000092	0.00025	mg/L	0.000092	36.90%
Mo 202.031†	24.8	0.00141	mg/L	0.000112	0.00141	mg/L	0.000112	7.92%
Na 589.592†	34.4	0.00338	mg/L	0.000477	0.00338	mg/L	0.000477	14.10%
Na 330.237†	-0.1	-0.00216	mg/L	0.457105	-0.00216	mg/L	0.457105	>999.9%
Ni 231.604†	4.0	0.00109	mg/L	0.001169	0.00109	mg/L	0.001169	107.35%
Pb 220.353†	5.6	0.00079	mg/L	0.001333	0.00079	mg/L	0.001333	167.93%
Sb 206.836†	10.8	0.00376	mg/L	0.002057	0.00376	mg/L	0.002057	54.70%
Se 196.026†	-3.0	-0.00235	mg/L	0.001661	-0.00235	mg/L	0.001661	70.65%
Si 288.158†	-0.5	-0.00030	mg/L	0.005410	-0.00030	mg/L	0.005410	>999.9%
Sn 189.927†	1.5	0.00043	mg/L	0.001156	0.00043	mg/L	0.001156	268.81%
Sr 421.552†	76.2	0.00010	mg/L	0.000025	0.00010	mg/L	0.000025	24.26%
Ti 334.903†	-0.5	-0.00003	mg/L	0.000658	-0.00003	mg/L	0.000658	>999.9%
Tl 190.801†	5.6	0.00263	mg/L	0.001639	0.00263	mg/L	0.001639	62.20%
V 292.402†	5.5	0.00005	mg/L	0.000134	0.00005	mg/L	0.000134	246.43%
Zn 206.200†	-0.7	-0.00019	mg/L	0.001443	-0.00019	mg/L	0.001443	758.12%

Analysis Begun

Start Time: 11/27/2012 1:38:24 PM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 11/27/2012 8:08:35 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\1127.sif
Batch ID:
Results Data Set: I2121127
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: VS22 MB1 SWC

Del

Autosampler Location: 328
Date Collected: 11/27/2012 1:38:26 PM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: VS22 MB1 SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS22 MB1 SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2299077.5	104.0	%	1.04				1.00%
ScR 361.383	285414.2	103.9	%	0.51				0.50%
Ag 328.068†	-14.2	-0.00010	mg/L	0.000315	-0.00019	mg/L	0.000629	330.15%
Al 308.215†	2.8	0.00198	mg/L	0.000425	0.00396	mg/L	0.000851	21.48%
As 188.979†	0.9	0.00055	mg/L	0.001571	0.00110	mg/L	0.003143	284.92%
B 249.677†	11.7	0.00178	mg/L	0.000706	0.00356	mg/L	0.001412	39.62%
Ba 233.527†	0.7	0.00018	mg/L	0.001133	0.00036	mg/L	0.002265	622.38%
Be 313.042†	-10.0	-0.00002	mg/L	0.000014	-0.00004	mg/L	0.000029	75.52%
Ca 317.933†	83.1	0.00682	mg/L	0.001006	0.01364	mg/L	0.002013	14.76%
Cd 228.802†	-1.3	-0.00005	mg/L	0.000113	-0.00011	mg/L	0.000226	215.02%
Co 228.616†	5.1	0.00015	mg/L	0.000132	0.00031	mg/L	0.000264	86.44%
Cr 267.716†	5.3	0.00096	mg/L	0.001220	0.00192	mg/L	0.002440	127.16%
Cu 324.752†	-134.9	-0.00061	mg/L	0.000169	-0.00123	mg/L	0.000338	27.58%
Fe 273.955†	8.8	0.00708	mg/L	0.000987	0.01417	mg/L	0.001974	13.93%
K 766.490†	-12.8	-0.00732	mg/L	0.018989	-0.01465	mg/L	0.037977	259.25%
Mg 279.077†	1.9	0.00157	mg/L	0.008602	0.00314	mg/L	0.017203	547.78%
Mn 257.610†	12.1	0.00037	mg/L	0.000121	0.00074	mg/L	0.000242	32.87%
Mo 202.031†	10.0	0.00057	mg/L	0.000154	0.00113	mg/L	0.000307	27.07%
Na 589.592†	57.0	0.00559	mg/L	0.002744	0.01119	mg/L	0.005488	49.05%
Na 330.237†	5.3	0.2098	mg/L	0.32275	0.4196	mg/L	0.64551	153.83%
Ni 231.604†	5.6	0.00152	mg/L	0.000947	0.00305	mg/L	0.001893	62.16%
Pb 220.353†	5.7	0.00080	mg/L	0.000568	0.00161	mg/L	0.001136	70.69%
Sb 206.836†	4.3	0.00149	mg/L	0.001917	0.00299	mg/L	0.003834	128.24%
Se 196.026†	-10.4	-0.00805	mg/L	0.002742	-0.01609	mg/L	0.005485	34.08%
Si 288.158†	9.5	0.00545	mg/L	0.002567	0.01089	mg/L	0.005133	47.13%
Sn 189.927†	2.2	0.00065	mg/L	0.000454	0.00131	mg/L	0.000908	69.51%
Sr 421.552†	45.6	0.00006	mg/L	0.000011	0.00012	mg/L	0.000022	17.39%
Ti 334.903†	-17.9	-0.00102	mg/L	0.000335	-0.00204	mg/L	0.000669	32.87%
Tl 190.801†	4.7	0.00220	mg/L	0.001670	0.00441	mg/L	0.003341	75.79%
V 292.402†	-1.7	-0.00001	mg/L	0.000187	-0.00002	mg/L	0.000374	>999.9%
Zn 206.200†	6.4	0.00186	mg/L	0.000893	0.00371	mg/L	0.001786	48.07%

Sequence No.: 2
Sample ID: VS22 B SWC

Dilution: 5.000000X

Autosampler Location: 329
Date Collected: 11/27/2012 1:42:41 PM
Data Type: Original

Nebulizer Parameters: VS22 B SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS22 B SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2328160.0	105.3	%	0.34				0.32%
ScR 361.383	290683.0	105.8	%	0.76				0.72%
Ag 328.068†	-106.7	-0.00066	mg/L	0.000097	-0.00332	mg/L	0.000486	14.64%
Al 308.215†	112993.6	81.20	mg/L	0.309	406.0	mg/L	1.55	0.38%
As 188.979†	-170.8	0.01806	mg/L	0.001208	0.09031	mg/L	0.006039	6.69%
B 249.677†	49.3	0.00744	mg/L	0.001202	0.03722	mg/L	0.006012	16.15%
Ba 233.527†	2417.7	0.5964	mg/L	0.00907	2.982	mg/L	0.0454	1.52%
Be 313.042†	879.2	0.00159	mg/L	0.000041	0.00795	mg/L	0.000204	2.56%
Ca 317.933†	325242.4	26.70	mg/L	0.137	133.5	mg/L	0.69	0.51%
Cd 228.802†	256.7	0.01009	mg/L	0.000069	0.05044	mg/L	0.000344	0.68%
Co 228.616†	1607.6	0.03802	mg/L	0.000155	0.1901	mg/L	0.00078	0.41%
Cr 267.716†	539.6	0.09810	mg/L	0.001231	0.4905	mg/L	0.00615	1.25%
Cu 324.752†	13523.2	0.06439	mg/L	0.000537	0.3219	mg/L	0.00269	0.83%
Fe 273.955†	113646.5	91.32	mg/L	0.385	456.6	mg/L	1.92	0.42%
K 766.490†	8696.0	4.994	mg/L	0.0499	24.97	mg/L	0.249	1.00%
Mg 279.077†	27951.5	23.58	mg/L	0.135	117.9	mg/L	0.68	0.57%
Mn 257.610†	68754.4	2.099	mg/L	0.0084	10.49	mg/L	0.042	0.40%
Mo 202.031†	60.8	0.00316	mg/L	0.000127	0.01582	mg/L	0.000633	4.00%
Na 589.592†	13794.3	1.354	mg/L	0.0051	6.772	mg/L	0.0256	0.38%
Na 330.237†	12.3	1.273	mg/L	0.1378	6.363	mg/L	0.6891	10.83%
Ni 231.604†	245.5	0.06622	mg/L	0.001114	0.3311	mg/L	0.00557	1.68%
Pb 220.353†	1570.7	0.2368	mg/L	0.00070	1.184	mg/L	0.0035	0.29%
Sb 206.836†	17.4	0.00729	mg/L	0.001527	0.03645	mg/L	0.007634	20.94%
Se 196.026†	-0.9	-0.00081	mg/L	0.001225	-0.00405	mg/L	0.006126	151.35%
Si 288.158†	2512.9	1.444	mg/L	0.0260	7.221	mg/L	0.1301	1.80%
Sn 189.927†	-32.6	-0.00566	mg/L	0.001373	-0.02829	mg/L	0.006864	24.26%
Sr 421.552†	142743.5	0.1956	mg/L	0.00074	0.9781	mg/L	0.00369	0.38%
Ti 334.903†	79368.3	4.517	mg/L	0.0111	22.59	mg/L	0.055	0.24%
Tl 190.801†	-14.7	0.00197	mg/L	0.002899	0.00985	mg/L	0.014493	147.07%
V 292.402†	19275.7	0.1770	mg/L	0.00119	0.8849	mg/L	0.00593	0.67%
Zn 206.200†	2591.7	0.7564	mg/L	0.00870	3.782	mg/L	0.0435	1.15%

Sequence No.: 3
Sample ID: VS22 C SWC

Dilution: 5.000000X

Del

Autosampler Location: 330
Date Collected: 11/27/2012 1:46:40 PM
Data Type: Original

Nebulizer Parameters: VS22 C SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS22 C SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2324745.5	105.1	%	0.23				0.22%
ScR 361.383	287486.3	104.7	%	0.59				0.56%
Ag 328.068†	-190.2	-0.00123	mg/L	0.000248	-0.00615	mg/L	0.001241	20.17%
Al 308.215†	136923.8	98.41	mg/L	0.204	492.0	mg/L	1.02	0.21%
As 188.979†	-180.1	0.00643	mg/L	0.002963	0.03214	mg/L	0.014814	46.08%
B 249.677†	44.5	0.00670	mg/L	0.001263	0.03351	mg/L	0.006314	18.84%
Ba 233.527†	2313.9	0.5690	mg/L	0.00165	2.845	mg/L	0.0083	0.29%
Be 313.042†	1345.4	0.00249	mg/L	0.000021	0.01244	mg/L	0.000105	0.84%
Ca 317.933†	287714.5	23.62	mg/L	0.052	118.1	mg/L	0.26	0.22%
Cd 228.802†	53.2	0.00200	mg/L	0.000105	0.00999	mg/L	0.000524	5.25%
Co 228.616†	1741.9	0.04233	mg/L	0.000431	0.2117	mg/L	0.00216	1.02%
Cr 267.716†	566.3	0.1034	mg/L	0.00133	0.5169	mg/L	0.00666	1.29%
Cu 324.752†	15540.4	0.07391	mg/L	0.000518	0.3695	mg/L	0.00259	0.70%
Fe 273.955†	122146.6	98.15	mg/L	0.283	490.8	mg/L	1.41	0.29%
K 766.490†	9580.7	5.502	mg/L	0.0241	27.51	mg/L	0.121	0.44%
Mg 279.077†	27198.2	22.94	mg/L	0.040	114.7	mg/L	0.20	0.17%
Mn 257.610†	32118.6	0.9804	mg/L	0.00191	4.902	mg/L	0.0096	0.20%
Mo 202.031†	52.0	0.00270	mg/L	0.000475	0.01349	mg/L	0.002374	17.59%
Na 589.592†	17278.8	1.696	mg/L	0.0074	8.482	mg/L	0.0369	0.44%
Na 330.237†	11.9	1.377	mg/L	0.2046	6.887	mg/L	1.0229	14.85%
Ni 231.604†	272.2	0.07341	mg/L	0.001458	0.3670	mg/L	0.00729	1.99%
Pb 220.353†	204.0	0.04831	mg/L	0.000399	0.2415	mg/L	0.00199	0.83%
Sb 206.836†	8.6	0.00398	mg/L	0.001300	0.01989	mg/L	0.006500	32.68%
Se 196.026†	-4.8	-0.00386	mg/L	0.001500	-0.01929	mg/L	0.007499	38.87%
Si 288.158†	3467.9	1.992	mg/L	0.0117	9.960	mg/L	0.0584	0.59%
Sn 189.927†	-26.1	-0.00415	mg/L	0.000840	-0.02074	mg/L	0.004202	20.26%
Sr 421.552†	138567.9	0.1899	mg/L	0.00047	0.9495	mg/L	0.00237	0.25%
Ti 334.903†	75805.7	4.315	mg/L	0.0076	21.57	mg/L	0.038	0.18%
Tl 190.801†	-14.0	0.00307	mg/L	0.004801	0.01535	mg/L	0.024007	156.35%
V 292.402†	17257.9	0.1577	mg/L	0.00091	0.7883	mg/L	0.00453	0.57%
Zn 206.200†	843.6	0.2462	mg/L	0.00245	1.231	mg/L	0.0122	0.99%

Sequence No.: 4
Sample ID: VS22 D SWC

Del

Dilution: 5.000000X

Autosampler Location: 331
Date Collected: 11/27/2012 1:50:39 PM
Data Type: Original

Nebulizer Parameters: VS22 D SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS22 D SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2350629.2	106.3	%	0.47				0.45%
ScR 361.383	289387.8	105.4	%	1.41				1.34%
Ag 328.068†	-385.2	-0.00253	mg/L	0.000197	-0.01264	mg/L	0.000984	7.79%
Al 308.215†	101917.4	73.24	mg/L	0.437	366.2	mg/L	2.19	0.60%
As 188.979†	-131.0	0.03591	mg/L	0.004378	0.1795	mg/L	0.02189	12.19%
B 249.677†	5.3	0.00071	mg/L	0.000581	0.00353	mg/L	0.002907	82.25%
Ba 233.527†	3272.1	0.8095	mg/L	0.01055	4.047	mg/L	0.0528	1.30%
Be 313.042†	1025.3	0.00186	mg/L	0.000036	0.00932	mg/L	0.000179	1.92%
Ca 317.933†	2741050.0	225.1	mg/L	2.67	1125	mg/L	13.34	1.19%
Cd 228.802†	60.6	0.00200	mg/L	0.000164	0.01000	mg/L	0.000822	8.22%
Co 228.616†	1797.4	0.04316	mg/L	0.000279	0.2158	mg/L	0.00140	0.65%
Cr 267.716†	772.3	0.1374	mg/L	0.00108	0.6871	mg/L	0.00541	0.79%
Cu 324.752†	26525.9	0.1241	mg/L	0.00017	0.6206	mg/L	0.00084	0.14%
Fe 273.955†	136217.6	109.5	mg/L	0.41	547.3	mg/L	2.05	0.37%
K 766.490†	13679.9	7.856	mg/L	0.0527	39.28	mg/L	0.263	0.67%
Mg 279.077†	48516.0	40.96	mg/L	0.154	204.8	mg/L	0.77	0.38%
Mn 257.610†	50942.7	1.555	mg/L	0.0054	7.773	mg/L	0.0269	0.35%
Mo 202.031†	111.8	0.00392	mg/L	0.000201	0.01959	mg/L	0.001006	5.13%
Na 589.592†	16960.1	1.665	mg/L	0.0121	8.326	mg/L	0.0605	0.73%
Na 330.237†	27.8	2.095	mg/L	0.0824	10.47	mg/L	0.412	3.94%
Ni 231.604†	383.5	0.1034	mg/L	0.00205	0.5171	mg/L	0.01023	1.98%
Pb 220.353†	173.9	0.03759	mg/L	0.001671	0.1879	mg/L	0.00835	4.44%
Sb 206.836†	3.3	0.00177	mg/L	0.002191	0.00885	mg/L	0.010956	123.85%
Se 196.026†	-21.4	-0.01679	mg/L	0.006088	-0.08394	mg/L	0.030438	36.26%
Si 288.158†	3030.9	1.744	mg/L	0.0299	8.718	mg/L	0.1495	1.71%
Sn 189.927†	-79.9	0.00494	mg/L	0.002283	0.02468	mg/L	0.011415	46.26%
Sr 421.552†	504247.3	0.6911	mg/L	0.00883	3.455	mg/L	0.0442	1.28%
Ti 334.903†	81770.6	4.645	mg/L	0.0222	23.22	mg/L	0.111	0.48%
Tl 190.801†	6.7	0.01379	mg/L	0.003196	0.06895	mg/L	0.015978	23.17%
V 292.402†	21921.5	0.2014	mg/L	0.00035	1.007	mg/L	0.0017	0.17%
Zn 206.200†	821.9	0.2399	mg/L	0.00270	1.199	mg/L	0.0135	1.13%

Sequence No.: 5 222222
Sample ID: ~~VS22 A-L SWC~~ BA 11/29/12
Dilution: 25.000000X

Del

Autosampler Location: 332
Date Collected: 11/27/2012 1:54:41 PM
Data Type: Original

Nebulizer Parameters: VS22 A-L SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS22 A-L SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2285899.9	103.4	%	0.39				0.38%
ScR 361.383	291233.2	106.0	%	3.25				3.07%
Ag 328.068†	6.8	0.00005	mg/L	0.000053	0.00130	mg/L	0.001334	102.91%
Al 308.215†	13271.4	9.538	mg/L	0.3700	238.4	mg/L	9.25	3.88%
As 188.979†	-9.9	0.00776	mg/L	0.000799	0.1941	mg/L	0.01997	10.29%
B 249.677†	12.8	0.00195	mg/L	0.000514	0.04871	mg/L	0.012843	26.37%
Ba 233.527†	524.5	0.1307	mg/L	0.00628	3.268	mg/L	0.1569	4.80%
Be 313.042†	121.0	0.00022	mg/L	0.000048	0.00552	mg/L	0.001205	21.82%
Ca 317.933†	75112.6	6.167	mg/L	0.2372	154.2	mg/L	5.93	3.85%
Cd 228.802†	119.5	0.00468	mg/L	0.000149	0.1170	mg/L	0.00373	3.19%
Co 228.616†	234.6	0.00586	mg/L	0.000162	0.1466	mg/L	0.00405	2.76%
Cr 267.716†	73.7	0.01332	mg/L	0.000611	0.3329	mg/L	0.01526	4.58%
Cu 324.752†	2909.7	0.01361	mg/L	0.000211	0.3402	mg/L	0.00527	1.55%
Fe 273.955†	14420.5	11.59	mg/L	0.490	289.7	mg/L	12.24	4.23%
K 766.490†	1553.1	0.8919	mg/L	0.03852	22.30	mg/L	0.963	4.32%
Mg 279.077†	3564.0	3.007	mg/L	0.1211	75.18	mg/L	3.028	4.03%
Mn 257.610†	23192.6	0.7079	mg/L	0.02854	17.70	mg/L	0.713	4.03%
Mo 202.031†	21.3	0.00114	mg/L	0.000375	0.02853	mg/L	0.009376	32.86%
Na 589.592†	1400.8	0.1375	mg/L	0.00702	3.438	mg/L	0.1756	5.11%
Na 330.237†	11.5	0.5079	mg/L	0.39787	12.70	mg/L	9.947	78.34%
Ni 231.604†	35.7	0.00964	mg/L	0.000852	0.2411	mg/L	0.02130	8.83%
Pb 220.353†	1353.5	0.1922	mg/L	0.00199	4.806	mg/L	0.0497	1.03%
Sb 206.836†	13.7	0.00488	mg/L	0.003239	0.1219	mg/L	0.08098	66.41%
Se 196.026†	-10.5	-0.00815	mg/L	0.002693	-0.2038	mg/L	0.06731	33.03%
Si 288.158†	297.2	0.1708	mg/L	0.01268	4.271	mg/L	0.3171	7.43%
Sn 189.927†	-3.1	-0.00008	mg/L	0.000353	-0.00199	mg/L	0.008825	444.49%
Sr 421.552†	30523.9	0.04183	mg/L	0.001653	1.046	mg/L	0.0413	3.95%
Ti 334.903†	8887.8	0.5057	mg/L	0.02108	12.64	mg/L	0.527	4.17%
Tl 190.801†	5.0	0.00346	mg/L	0.001259	0.08652	mg/L	0.031483	36.39%
V 292.402†	2375.4	0.02190	mg/L	0.000144	0.5476	mg/L	0.00359	0.66%
Zn 206.200†	699.4	0.2041	mg/L	0.00866	5.103	mg/L	0.2165	4.24%

Sequence No.: 6
Sample ID: VS22 A SWC

Dilution: 5.000000X

Dal

Autosampler Location: 333
Date Collected: 11/27/2012 1:58:39 PM
Data Type: Original

Nebulizer Parameters: VS22 A SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS22 A SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2386266.1	107.9	%	1.53				1.42%
ScR 361.383	305862.1	111.4	%	0.81				0.73%
Ag 328.068†	92.8	0.00065	mg/L	0.000282	0.00326	mg/L	0.001409	43.19%
Al 308.215†	62126.6	44.65	mg/L	0.387	223.2	mg/L	1.93	0.87%
As 188.979†	-53.4	0.03192	mg/L	0.000841	0.1596	mg/L	0.00421	2.63%
B 249.677†	64.2	0.00974	mg/L	0.000257	0.04871	mg/L	0.001286	2.64%
Ba 233.527†	2459.0	0.6129	mg/L	0.00605	3.064	mg/L	0.0302	0.99%
Be 313.042†	545.4	0.00099	mg/L	0.000034	0.00497	mg/L	0.000172	3.47%
Ca 317.933†	356774.3	29.29	mg/L	0.191	146.5	mg/L	0.95	0.65%
Cd 228.802†	547.5	0.02146	mg/L	0.000406	0.1073	mg/L	0.00203	1.89%
Co 228.616†	1059.6	0.02628	mg/L	0.000693	0.1314	mg/L	0.00347	2.64%
Cr 267.716†	330.0	0.05970	mg/L	0.000811	0.2985	mg/L	0.00405	1.36%
Cu 324.752†	14012.1	0.06550	mg/L	0.001261	0.3275	mg/L	0.00630	1.93%
Fe 273.955†	67705.1	54.41	mg/L	0.620	272.0	mg/L	3.10	1.14%
K 766.490†	7408.6	4.255	mg/L	0.0227	21.27	mg/L	0.114	0.53%
Mg 279.077†	15896.6	13.41	mg/L	0.101	67.05	mg/L	0.504	0.75%
Mn 257.610†	109301.3	3.336	mg/L	0.0408	16.68	mg/L	0.204	1.22%
Mo 202.031†	73.1	0.00383	mg/L	0.000491	0.01917	mg/L	0.002456	12.81%
Na 589.592†	6402.8	0.6286	mg/L	0.00631	3.143	mg/L	0.0315	1.00%
Na 330.237†	22.5	1.125	mg/L	0.1534	5.625	mg/L	0.7668	13.63%
Ni 231.604†	161.3	0.04351	mg/L	0.000591	0.2175	mg/L	0.00296	1.36%
Pb 220.353†	6217.2	0.8832	mg/L	0.01511	4.416	mg/L	0.0755	1.71%
Sb 206.836†	26.7	0.00987	mg/L	0.001729	0.04937	mg/L	0.008647	17.51%
Se 196.026†	4.6	0.00351	mg/L	0.003822	0.01754	mg/L	0.019109	108.92%
Si 288.158†	1417.6	0.8148	mg/L	0.01341	4.074	mg/L	0.0670	1.65%
Sn 189.927†	-17.0	-0.00101	mg/L	0.000498	-0.00506	mg/L	0.002489	49.19%
Sr 421.552†	142014.9	0.1946	mg/L	0.00149	0.9732	mg/L	0.00744	0.76%
Ti 334.903†	41705.6	2.373	mg/L	0.0236	11.87	mg/L	0.118	1.00%
Tl 190.801†	5.9	0.00805	mg/L	0.002526	0.04027	mg/L	0.012632	31.37%
V 292.402†	10790.6	0.09940	mg/L	0.001623	0.4970	mg/L	0.00811	1.63%
Zn 206.200†	3302.9	0.9640	mg/L	0.00776	4.820	mg/L	0.0388	0.80%

Sequence No.: 7
Sample ID: VS22 ADUP SWC

Dilution: 5.000000X

Del

Autosampler Location: 334
Date Collected: 11/27/2012 2:02:39 PM
Data Type: Original

Nebulizer Parameters: VS22 ADUP SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS22 ADUP SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2410458.8	109.0	%	0.53				0.48%
ScR 361.383	294470.5	107.2	%	1.10				1.03%
Ag 328.068†	72.5	0.00052	mg/L	0.000210	0.00259	mg/L	0.001049	40.47%
Al 308.215†	67203.2	48.30	mg/L	0.539	241.5	mg/L	2.69	1.12%
As 188.979†	-63.5	0.03370	mg/L	0.001709	0.1685	mg/L	0.00854	5.07%
B 249.677†	79.4	0.01207	mg/L	0.001080	0.06035	mg/L	0.005400	8.95%
Ba 233.527†	2638.4	0.6577	mg/L	0.00349	3.288	mg/L	0.0175	0.53%
Be 313.042†	590.4	0.00108	mg/L	0.000017	0.00538	mg/L	0.000087	1.62%
Ca 317.933†	385457.0	31.65	mg/L	0.347	158.2	mg/L	1.73	1.10%
Cd 228.802†	572.0	0.02244	mg/L	0.000248	0.1122	mg/L	0.00124	1.11%
Co 228.616†	1067.5	0.02590	mg/L	0.000285	0.1295	mg/L	0.00143	1.10%
Cr 267.716†	345.1	0.06244	mg/L	0.000579	0.3122	mg/L	0.00290	0.93%
Cu 324.752†	14311.2	0.06695	mg/L	0.000017	0.3347	mg/L	0.00009	0.03%
Fe 273.955†	72131.8	57.96	mg/L	0.522	289.8	mg/L	2.61	0.90%
K 766.490†	8196.2	4.707	mg/L	0.0676	23.54	mg/L	0.338	1.44%
Mg 279.077†	16945.4	14.30	mg/L	0.144	71.48	mg/L	0.722	1.01%
Mn 257.610†	117471.5	3.586	mg/L	0.0396	17.93	mg/L	0.198	1.10%
Mo 202.031†	63.9	0.00329	mg/L	0.000205	0.01645	mg/L	0.001025	6.23%
Na 589.592†	7377.1	0.7243	mg/L	0.00928	3.621	mg/L	0.0464	1.28%
Na 330.237†	17.9	0.9868	mg/L	0.07791	4.934	mg/L	0.3896	7.90%
Ni 231.604†	164.8	0.04445	mg/L	0.001341	0.2223	mg/L	0.00670	3.02%
Pb 220.353†	6290.5	0.8943	mg/L	0.00573	4.471	mg/L	0.0287	0.64%
Sb 206.836†	23.3	0.00877	mg/L	0.001345	0.04387	mg/L	0.006726	15.33%
Se 196.026†	-2.6	-0.00213	mg/L	0.006090	-0.01063	mg/L	0.030452	286.34%
Si 288.158†	1498.4	0.8613	mg/L	0.00831	4.306	mg/L	0.0415	0.96%
Sn 189.927†	-21.4	-0.00197	mg/L	0.001218	-0.00983	mg/L	0.006091	61.93%
Sr 421.552†	155225.8	0.2127	mg/L	0.00242	1.064	mg/L	0.0121	1.14%
Ti 334.903†	46881.9	2.668	mg/L	0.0281	13.34	mg/L	0.140	1.05%
Tl 190.801†	2.2	0.00666	mg/L	0.001465	0.03332	mg/L	0.007324	21.98%
V 292.402†	11433.4	0.1052	mg/L	0.00047	0.5262	mg/L	0.00234	0.45%
Zn 206.200†	3507.2	1.024	mg/L	0.0067	5.118	mg/L	0.0333	0.65%

Sequence No.: 8
Sample ID: VS22 ASPK SWC

Dilution: 5.000000X

Del

Autosampler Location: 335
Date Collected: 11/27/2012 2:06:38 PM
Data Type: Original

Nebulizer Parameters: VS22 ASPK SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS22 ASPK SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2411209.9	109.1	%	0.48				0.44%
ScR 361.383	302231.3	110.0	%	0.51				0.46%
Ag 328.068†	29865.6	0.2007	mg/L	0.00108	1.004	mg/L	0.0054	0.54%
Al 308.215†	68994.5	49.58	mg/L	0.379	247.9	mg/L	1.89	0.76%
As 188.979†	1171.1	0.8261	mg/L	0.00413	4.130	mg/L	0.0206	0.50%
B 249.677†	80.0	0.01175	mg/L	0.000632	0.05873	mg/L	0.003159	5.38%
Ba 233.527†	5678.6	1.426	mg/L	0.0009	7.132	mg/L	0.0045	0.06%
Be 313.042†	103380.0	0.1976	mg/L	0.00144	0.9882	mg/L	0.00719	0.73%
Ca 317.933†	434202.8	35.65	mg/L	0.259	178.3	mg/L	1.30	0.73%
Cd 228.802†	5934.0	0.2300	mg/L	0.00120	1.150	mg/L	0.0060	0.52%
Co 228.616†	7827.8	0.2276	mg/L	0.00155	1.138	mg/L	0.0077	0.68%
Cr 267.716†	1453.8	0.2614	mg/L	0.00131	1.307	mg/L	0.0065	0.50%
Cu 324.752†	60013.7	0.2747	mg/L	0.00104	1.374	mg/L	0.0052	0.38%
Fe 273.955†	72537.0	58.29	mg/L	0.572	291.4	mg/L	2.86	0.98%
K 766.490†	14753.7	8.473	mg/L	0.0584	42.37	mg/L	0.292	0.69%
Mg 279.077†	22515.8	19.01	mg/L	0.022	95.03	mg/L	0.112	0.12%
Mn 257.610†	122673.8	3.744	mg/L	0.0336	18.72	mg/L	0.168	0.90%
Mo 202.031†	68.8	0.00351	mg/L	0.000196	0.01756	mg/L	0.000979	5.57%
Na 589.592†	45976.1	4.514	mg/L	0.0334	22.57	mg/L	0.167	0.74%
Na 330.237†	125.5	5.237	mg/L	0.1513	26.19	mg/L	0.757	2.89%
Ni 231.604†	868.1	0.2338	mg/L	0.00004	1.169	mg/L	0.0002	0.02%
Pb 220.353†	11927.6	1.688	mg/L	0.0129	8.439	mg/L	0.0646	0.77%
Sb 206.836†	27.0	0.00799	mg/L	0.000638	0.03994	mg/L	0.003188	7.98%
Se 196.026†	1023.7	0.7947	mg/L	0.01104	3.973	mg/L	0.0552	1.39%
Si 288.158†	1335.9	0.7694	mg/L	0.00533	3.847	mg/L	0.0267	0.69%
Sn 189.927†	-26.0	-0.00282	mg/L	0.000527	-0.01412	mg/L	0.002633	18.65%
Sr 421.552†	297342.7	0.4075	mg/L	0.00301	2.038	mg/L	0.0151	0.74%
Ti 334.903†	46913.9	2.669	mg/L	0.0204	13.35	mg/L	0.102	0.76%
Tl 190.801†	1631.7	0.7672	mg/L	0.00631	3.836	mg/L	0.0316	0.82%
V 292.402†	32429.3	0.3043	mg/L	0.00126	1.522	mg/L	0.0063	0.41%
Zn 206.200†	4074.4	1.189	mg/L	0.0024	5.946	mg/L	0.0122	0.21%

Sequence No.: 9 ZZZZZ
Sample ID: ~~VS22 APOST SWC~~ BA 11/28/12 Del

Autosampler Location: 336
Date Collected: 11/27/2012 2:10:37 PM
Data Type: Original

Dilution: 5.000000X

Nebulizer Parameters: VS22 APOST SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS22 APOST SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2433828.2	110.1	%	0.73				0.66%
ScR 361.383	303834.7	110.6	%	0.57				0.52%
Ag 328.068†	67862.5	0.4560	mg/L	0.00231	2.280	mg/L	0.0115	0.51%
Al 308.215†	66584.2	47.85	mg/L	0.236	239.2	mg/L	1.18	0.49%
As 188.979†	3020.6	2.006	mg/L	0.0202	10.03	mg/L	0.101	1.01%
B 249.677†	70.4	0.00969	mg/L	0.000722	0.04845	mg/L	0.003610	7.45%
Ba 233.527†	9961.4	2.510	mg/L	0.0069	12.55	mg/L	0.034	0.27%
Be 313.042†	250983.4	0.4799	mg/L	0.00193	2.400	mg/L	0.0097	0.40%
Ca 317.933†	479078.7	39.33	mg/L	0.114	196.7	mg/L	0.57	0.29%
Cd 228.802†	13590.3	0.5261	mg/L	0.00474	2.630	mg/L	0.0237	0.90%
Co 228.616†	17387.3	0.5134	mg/L	0.00459	2.567	mg/L	0.0229	0.89%
Cr 267.716†	2997.2	0.5384	mg/L	0.00073	2.692	mg/L	0.0036	0.14%
Cu 324.752†	119943.9	0.5471	mg/L	0.00209	2.736	mg/L	0.0105	0.38%
Fe 273.955†	71334.2	57.32	mg/L	0.257	286.6	mg/L	1.28	0.45%
K 766.490†	24101.3	13.84	mg/L	0.023	69.21	mg/L	0.116	0.17%
Mg 279.077†	28562.6	24.12	mg/L	0.024	120.6	mg/L	0.12	0.10%
Mn 257.610†	126825.6	3.871	mg/L	0.0134	19.36	mg/L	0.067	0.35%
Mo 202.031†	75.9	0.00386	mg/L	0.000136	0.01930	mg/L	0.000681	3.53%
Na 589.592†	99563.7	9.775	mg/L	0.0307	48.88	mg/L	0.153	0.31%
Na 330.237†	268.0	10.81	mg/L	0.010	54.03	mg/L	0.048	0.09%
Ni 231.604†	1869.5	0.5034	mg/L	0.00042	2.517	mg/L	0.0021	0.08%
Pb 220.353†	19862.3	2.804	mg/L	0.0285	14.02	mg/L	0.143	1.02%
Sb 206.836†	37.7	0.00863	mg/L	0.004270	0.04314	mg/L	0.021348	49.49%
Se 196.026†	2555.7	1.984	mg/L	0.0234	9.920	mg/L	0.1171	1.18%
Si 288.158†	1435.5	0.8282	mg/L	0.01077	4.141	mg/L	0.0539	1.30%
Sn 189.927†	-27.9	-0.00292	mg/L	0.000810	-0.01461	mg/L	0.004051	27.73%
Sr 421.552†	484991.3	0.6647	mg/L	0.00224	3.323	mg/L	0.0112	0.34%
Ti 334.903†	42851.3	2.438	mg/L	0.0078	12.19	mg/L	0.039	0.32%
Tl 190.801†	4009.0	1.877	mg/L	0.0152	9.384	mg/L	0.0762	0.81%
V 292.402†	59879.9	0.5649	mg/L	0.00155	2.824	mg/L	0.0078	0.27%
Zn 206.200†	4937.4	1.441	mg/L	0.0013	7.205	mg/L	0.0063	0.09%

Sequence No.: 10
Sample ID: VS22 MB1SPK SWC

Dilution: 2.000000X

Autosampler Location: 337
Date Collected: 11/27/2012 2:14:23 PM
Data Type: Original

Nebulizer Parameters: VS22 MB1SPK SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS22 MB1SPK SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2434017.1	110.1	%	0.79				0.72%
ScR 361.383	301782.8	109.9	%	0.68				0.62%
Ag 328.068†	75651.2	0.5083	mg/L	0.00064	1.017	mg/L	0.0013	0.13%
Al 308.215†	2679.1	1.919	mg/L	0.0104	3.837	mg/L	0.0208	0.54%
As 188.979†	3089.8	1.983	mg/L	0.0186	3.966	mg/L	0.0372	0.94%
B 249.677†	15.4	0.00134	mg/L	0.000704	0.00268	mg/L	0.001408	52.52%
Ba 233.527†	7595.8	1.920	mg/L	0.0100	3.841	mg/L	0.0200	0.52%
Be 313.042†	254852.0	0.4874	mg/L	0.00265	0.9747	mg/L	0.00530	0.54%
Ca 317.933†	116476.2	9.563	mg/L	0.0359	19.13	mg/L	0.072	0.38%
Cd 228.802†	12949.4	0.5009	mg/L	0.00086	1.002	mg/L	0.0017	0.17%
Co 228.616†	16391.6	0.4892	mg/L	0.00044	0.9783	mg/L	0.00089	0.09%
Cr 267.716†	2750.0	0.4936	mg/L	0.00221	0.9873	mg/L	0.00443	0.45%
Cu 324.752†	103915.9	0.4725	mg/L	0.00120	0.9449	mg/L	0.00239	0.25%
Fe 273.955†	2463.0	1.976	mg/L	0.0073	3.952	mg/L	0.0145	0.37%
K 766.490†	16539.8	9.499	mg/L	0.0610	19.00	mg/L	0.122	0.64%
Mg 279.077†	11641.5	9.842	mg/L	0.0413	19.68	mg/L	0.083	0.42%
Mn 257.610†	16164.6	0.4937	mg/L	0.00167	0.9874	mg/L	0.00333	0.34%
Mo 202.031†	18.3	0.00091	mg/L	0.000377	0.00182	mg/L	0.000754	41.34%
Na 589.592†	93654.7	9.195	mg/L	0.0660	18.39	mg/L	0.132	0.72%
Na 330.237†	260.6	10.27	mg/L	0.178	20.54	mg/L	0.357	1.74%
Ni 231.604†	1755.0	0.4725	mg/L	0.00244	0.9449	mg/L	0.00489	0.52%
Pb 220.353†	13693.4	1.927	mg/L	0.0025	3.855	mg/L	0.0050	0.13%
Sb 206.836†	15.8	0.00029	mg/L	0.002493	0.00057	mg/L	0.004985	867.54%
Se 196.026†	2529.1	1.963	mg/L	0.0100	3.927	mg/L	0.0199	0.51%
Si 288.158†	4.4	0.00560	mg/L	0.001417	0.01119	mg/L	0.002834	25.32%
Sn 189.927†	-14.7	-0.00308	mg/L	0.000498	-0.00615	mg/L	0.000995	16.18%
Sr 421.552†	342443.0	0.4693	mg/L	0.00252	0.9386	mg/L	0.00504	0.54%
Ti 334.903†	27.2	0.00099	mg/L	0.000131	0.00198	mg/L	0.000263	13.25%
Tl 190.801†	4105.0	1.916	mg/L	0.0189	3.833	mg/L	0.0379	0.99%
V 292.402†	51472.0	0.4881	mg/L	0.00031	0.9762	mg/L	0.00063	0.06%
Zn 206.200†	1655.4	0.4832	mg/L	0.00172	0.9664	mg/L	0.00343	0.36%

Sequence No.: 11
Sample ID: CV 7

Autosampler Location: 7
Date Collected: 11/27/2012 2:18:22 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	215.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2386525.2	107.9	%	3.59				3.33%
ScR 361.383	19069.3	6.943	%	5.7178				82.36%
Saturated within auto integration window (code 4)								
Ag 328.068†	149452.5	1.004	mg/L	0.0464	1.004	mg/L	0.0464	4.62%
Al 308.215†	19044.3	13.66	mg/L	11.709	13.66	mg/L	11.709	85.74%
Saturated within auto integration window (code 4)								
As 188.979†	3149.6	2.018	mg/L	0.0846	2.018	mg/L	0.0846	4.19%
B 249.677†	13076.8	1.997	mg/L	2.8125	1.997	mg/L	2.8125	140.81%
Saturated within auto integration window (code 4)								
Ba 233.527†	11862.4	2.998	mg/L	3.8505	2.998	mg/L	3.8505	128.43%
Be 313.042†	70861.4	0.1353	mg/L	0.20763	0.1353	mg/L	0.20763	153.41%
Saturated within auto integration window (code 4)								
Ca 317.933†	55121.4	4.526	mg/L	6.3705	4.526	mg/L	6.3705	140.76%
Cd 228.802†	25557.1	1.002	mg/L	0.0512	1.002	mg/L	0.0512	5.11%
Co 228.616†	32832.8	0.9798	mg/L	0.04795	0.9798	mg/L	0.04795	4.89%
Cr 267.716†	2493.5	0.4473	mg/L	5.57932	0.4473	mg/L	5.57932	>999.9%
Saturated within auto integration window (code 4)								
Cu 324.752†	217736.4	0.9898	mg/L	0.04875	0.9898	mg/L	0.04875	4.93%
Fe 273.955†	9320.7	7.482	mg/L	8.2868	7.482	mg/L	8.2868	110.75%
K 766.490†	56498.7	32.45	mg/L	32.589	32.45	mg/L	32.589	100.44%
Saturated within auto integration window (code 4)								
Mg 279.077†	13468.1	11.39	mg/L	9.251	11.39	mg/L	9.251	81.22%
Mn 257.610†	30411.6	0.9285	mg/L	0.67578	0.9285	mg/L	0.67578	72.78%
Saturated within auto integration window (code 4)								
Mo 202.031†	17350.8	0.9866	mg/L	0.05120	0.9866	mg/L	0.05120	5.19%
Na 589.592†	-24927.5	-2.447	mg/L	8.1132	-2.447	mg/L	8.1132	331.51%
Saturated within auto integration window (code 4)								
Na 330.237†	-15629.4	-626.6	mg/L	1114.86	-626.6	mg/L	1114.86	177.91%
Saturated within auto integration window (code 4)								
Ni 231.604†	7947.1	2.143	mg/L	4.6789	2.143	mg/L	4.6789	218.29%
Saturated within auto integration window (code 4)								
Pb 220.353†	13905.2	1.959	mg/L	0.1043	1.959	mg/L	0.1043	5.32%
Sb 206.836†	6082.2	2.131	mg/L	0.0406	2.131	mg/L	0.0406	1.90%
Se 196.026†	2581.2	2.003	mg/L	0.0773	2.003	mg/L	0.0773	3.86%
Si 288.158†	14234.6	8.165	mg/L	7.3442	8.165	mg/L	7.3442	89.95%
Sn 189.927†	3436.6	1.015	mg/L	0.0408	1.015	mg/L	0.0408	4.02%
Sr 421.552†	75605.6	0.1036	mg/L	0.10266	0.1036	mg/L	0.10266	99.08%
Saturated within auto integration window (code 4)								
Ti 334.903†	-430.2	-0.02565	mg/L	0.424327	-0.02565	mg/L	0.424327	>999.9%
Saturated within auto integration window (code 4)								
Tl 190.801†	4243.4	1.978	mg/L	0.0800	1.978	mg/L	0.0800	4.04%
V 292.402†	104014.2	0.9844	mg/L	0.06970	0.9844	mg/L	0.06970	7.08%
Zn 206.200†	11718.6	3.420	mg/L	4.9921	3.420	mg/L	4.9921	145.98%

Sequence No.: 12
Sample ID: CB

Autosampler Location: 1
Date Collected: 11/27/2012 2:24:10 PM
Data Type: Original

Dilution: 1.000000X
User canceled analysis.

Analysis Begun

Start Time: 11/27/2012 2:27:04 PM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 11/27/2012 8:08:35 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\1127.sif
Batch ID:
Results Data Set: I2121127
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 11
Sample ID: CV 8

Autosampler Location: 7
Date Collected: 11/27/2012 2:27:04 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	215.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2368646.4	107.1	%	0.48				0.45%
ScR 361.383	24475.8	8.911	%	2.9221				32.79%
Saturated within auto integration window (code 4)								
Ag 328.068†	149334.8	1.003	mg/L	0.0093	1.003	mg/L	0.0093	0.93%
Al 308.215†	14843.2	10.64	mg/L	7.432	10.64	mg/L	7.432	69.87%
Saturated within auto integration window (code 4)								
As 188.979†	3116.6	1.998	mg/L	0.0099	1.998	mg/L	0.0099	0.50%
B 249.677†	23242.9	3.551	mg/L	3.0097	3.551	mg/L	3.0097	84.76%
Saturated within auto integration window (code 4)								
Ba 233.527†	20213.2	5.109	mg/L	4.3051	5.109	mg/L	4.3051	84.27%
Be 313.042†	5675.8	0.01066	mg/L	0.010193	0.01066	mg/L	0.010193	95.64%
Saturated within auto integration window (code 4)								
Ca 317.933†	107740.4	8.846	mg/L	9.7434	8.846	mg/L	9.7434	110.14%
Cd 228.802†	25649.8	1.009	mg/L	0.0071	1.009	mg/L	0.0071	0.70%
Co 228.616†	32852.4	0.9793	mg/L	0.00501	0.9793	mg/L	0.00501	0.51%
Cr 267.716†	22767.4	4.094	mg/L	3.9032	4.094	mg/L	3.9032	95.33%
Saturated within auto integration window (code 4)								
Cu 324.752†	217975.5	0.9910	mg/L	0.00953	0.9910	mg/L	0.00953	0.96%
Fe 273.955†	14281.6	11.47	mg/L	9.685	11.47	mg/L	9.685	84.41%
K 766.490†	32057.0	18.41	mg/L	13.644	18.41	mg/L	13.644	74.11%
Saturated within auto integration window (code 4)								
Mg 279.077†	15529.0	13.13	mg/L	10.436	13.13	mg/L	10.436	79.45%
Mn 257.610†	31333.4	0.9567	mg/L	0.74809	0.9567	mg/L	0.74809	78.19%
Saturated within auto integration window (code 4)								
Mo 202.031†	17401.4	0.9892	mg/L	0.00800	0.9892	mg/L	0.00800	0.81%
Na 589.592†	24335.9	2.389	mg/L	2.6914	2.389	mg/L	2.6914	112.65%
Saturated within auto integration window (code 4)								
Na 330.237†	-609.8	-26.47	mg/L	68.654	-26.47	mg/L	68.654	259.34%
Saturated within auto integration window (code 4)								
Ni 231.604†	18725.0	5.050	mg/L	4.4287	5.050	mg/L	4.4287	87.70%
Saturated within auto integration window (code 4)								
Pb 220.353†	13911.1	1.966	mg/L	0.0166	1.966	mg/L	0.0166	0.84%
Sb 206.836†	6057.5	2.070	mg/L	0.0489	2.070	mg/L	0.0489	2.36%
Se 196.026†	2561.6	1.988	mg/L	0.0106	1.988	mg/L	0.0106	0.53%
Si 288.158†	19020.7	10.91	mg/L	9.030	10.91	mg/L	9.030	82.77%
Sn 189.927†	3419.3	1.011	mg/L	0.0047	1.011	mg/L	0.0047	0.46%
Sr 421.552†	93501.3	0.1281	mg/L	0.10606	0.1281	mg/L	0.10606	82.77%

Saturated within auto integration window (code 4)						
Ti 334.903†	3850.6	0.2171 mg/L	0.23480	0.2171 mg/L	0.23480	108.13%
Saturated within auto integration window (code 4)						
Tl 190.801†	4208.4	1.961 mg/L	0.0164	1.961 mg/L	0.0164	0.83%
V 292.402†	103958.9	0.9993 mg/L	0.01968	0.9993 mg/L	0.01968	1.97%
Zn 206.200†	22047.2	6.434 mg/L	5.5193	6.434 mg/L	5.5193	85.79%

User canceled analysis.

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Analysis Begun

Start Time: 11/27/2012 2:37:49 PM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202

Plasma On Time: 11/27/2012 8:08:35 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\1127.sif
Batch ID:
Results Data Set: I2121127
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

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Sequence No.: 11
Sample ID: CV 9

Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 11/27/2012 2:37:50 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2337991.9	105.7	%	0.32				0.31%
ScR 361.383	288110.8	104.9	%	1.08				1.03%
Ag 328.068†	153156.4	1.029	mg/L	0.0045	1.029	mg/L	0.0045	0.44%
Al 308.215†	2813.1	1.988	mg/L	0.0209	1.988	mg/L	0.0209	1.05%
As 188.979†	3194.7	2.076	mg/L	0.0153	2.076	mg/L	0.0153	0.74%
B 249.677†	6323.0	0.9653	mg/L	0.01265	0.9653	mg/L	0.01265	1.31%
Ba 233.527†	3913.5	0.9891	mg/L	0.00842	0.9891	mg/L	0.00842	0.85%
Be 313.042†	525227.9	1.004	mg/L	0.0077	1.004	mg/L	0.0077	0.77%
Ca 317.933†	23834.4	1.957	mg/L	0.0111	1.957	mg/L	0.0111	0.57%
Cd 228.802†	26132.9	1.024	mg/L	0.0048	1.024	mg/L	0.0048	0.47%
Co 228.616†	33599.8	1.001	mg/L	0.0061	1.001	mg/L	0.0061	0.61%
Cr 267.716†	5649.2	1.016	mg/L	0.0100	1.016	mg/L	0.0100	0.98%
Cu 324.752†	221813.4	1.008	mg/L	0.0021	1.008	mg/L	0.0021	0.21%
Fe 273.955†	2557.2	2.048	mg/L	0.0211	2.048	mg/L	0.0211	1.03%
K 766.490†	34862.2	20.02	mg/L	0.161	20.02	mg/L	0.161	0.80%
Mg 279.077†	2361.2	2.003	mg/L	0.0170	2.003	mg/L	0.0170	0.85%
Mn 257.610†	32753.0	1.000	mg/L	0.0055	1.000	mg/L	0.0055	0.55%
Mo 202.031†	17649.7	1.004	mg/L	0.0017	1.004	mg/L	0.0017	0.16%
Na 589.592†	495934.9	48.69	mg/L	0.532	48.69	mg/L	0.532	1.09%
Na 330.237†	1303.1	52.05	mg/L	0.335	52.05	mg/L	0.335	0.64%
Ni 231.604†	3615.4	0.9753	mg/L	0.00946	0.9753	mg/L	0.00946	0.97%
Pb 220.353†	14158.2	1.993	mg/L	0.0074	1.993	mg/L	0.0074	0.37%
Sb 206.836†	6101.6	2.131	mg/L	0.0065	2.131	mg/L	0.0065	0.30%
Se 196.026†	2583.5	2.005	mg/L	0.0050	2.005	mg/L	0.0050	0.25%
Si 288.158†	3690.5	2.116	mg/L	0.0215	2.116	mg/L	0.0215	1.02%
Sn 189.927†	3476.1	1.027	mg/L	0.0087	1.027	mg/L	0.0087	0.85%
Sr 421.552†	706618.4	0.9684	mg/L	0.00745	0.9684	mg/L	0.00745	0.77%
Ti 334.903†	18196.1	1.035	mg/L	0.0046	1.035	mg/L	0.0046	0.44%
Tl 190.801†	4281.0	1.995	mg/L	0.0113	1.995	mg/L	0.0113	0.57%
V 292.402†	104696.9	0.9929	mg/L	0.01309	0.9929	mg/L	0.01309	1.32%
Zn 206.200†	3535.7	1.032	mg/L	0.0106	1.032	mg/L	0.0106	1.03%

Sequence No.: 12
Sample ID: CB 6

Autosampler Location: 1
Date Collected: 11/27/2012 2:42:54 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2349712.4	106.3	%	0.48				0.45%
ScR 361.383	299222.3	108.9	%	0.32				0.29%
Ag 328.068†	28.5	0.00019	mg/L	0.000424	0.00019	mg/L	0.000424	221.51%
Al 308.215†	-9.3	-0.00671	mg/L	0.002988	-0.00671	mg/L	0.002988	44.52%
As 188.979†	3.3	0.00211	mg/L	0.001312	0.00211	mg/L	0.001312	62.07%
B 249.677†	14.3	0.00219	mg/L	0.001159	0.00219	mg/L	0.001159	52.98%
Ba 233.527†	-1.3	-0.00032	mg/L	0.000604	-0.00032	mg/L	0.000604	187.16%
Be 313.042†	-6.2	-0.00001	mg/L	0.000036	-0.00001	mg/L	0.000036	304.01%
Ca 317.933†	-12.9	-0.00106	mg/L	0.000410	-0.00106	mg/L	0.000410	38.65%
Cd 228.802†	-7.0	-0.00029	mg/L	0.000139	-0.00029	mg/L	0.000139	47.94%
Co 228.616†	9.4	0.00028	mg/L	0.000099	0.00028	mg/L	0.000099	35.34%
Cr 267.716†	3.5	0.00063	mg/L	0.001368	0.00063	mg/L	0.001368	215.60%
Cu 324.752†	-767.1	-0.00349	mg/L	0.000054	-0.00349	mg/L	0.000054	1.54%
Fe 273.955†	-2.4	-0.00191	mg/L	0.002227	-0.00191	mg/L	0.002227	116.48%
K 766.490†	-41.8	-0.02400	mg/L	0.007835	-0.02400	mg/L	0.007835	32.64%
Mg 279.077†	-8.1	-0.00681	mg/L	0.002065	-0.00681	mg/L	0.002065	30.31%
Mn 257.610†	0.3	0.00001	mg/L	0.000214	0.00001	mg/L	0.000214	>999.9%
Mo 202.031†	8.3	0.00047	mg/L	0.000361	0.00047	mg/L	0.000361	76.94%
Na 589.592†	23.3	0.00229	mg/L	0.002882	0.00229	mg/L	0.002882	125.73%
Na 330.237†	13.0	0.5186	mg/L	0.44411	0.5186	mg/L	0.44411	85.64%
Ni 231.604†	2.4	0.00064	mg/L	0.002513	0.00064	mg/L	0.002513	391.64%
Pb 220.353†	1.1	0.00016	mg/L	0.000255	0.00016	mg/L	0.000255	155.83%
Sb 206.836†	-2.2	-0.00078	mg/L	0.001074	-0.00078	mg/L	0.001074	137.44%
Se 196.026†	-1.7	-0.00133	mg/L	0.002053	-0.00133	mg/L	0.002053	154.92%
Si 288.158†	5.0	0.00289	mg/L	0.003423	0.00289	mg/L	0.003423	118.42%
Sn 189.927†	2.8	0.00082	mg/L	0.001181	0.00082	mg/L	0.001181	143.65%
Sr 421.552†	40.7	0.00006	mg/L	0.000036	0.00006	mg/L	0.000036	63.91%
Ti 334.903†	5.4	0.00031	mg/L	0.000670	0.00031	mg/L	0.000670	216.91%
Tl 190.801†	9.3	0.00437	mg/L	0.000795	0.00437	mg/L	0.000795	18.21%
V 292.402†	-10.1	-0.00009	mg/L	0.000096	-0.00009	mg/L	0.000096	103.92%
Zn 206.200†	-0.1	-0.00004	mg/L	0.000683	-0.00004	mg/L	0.000683	>999.9%

Sequence No.: 13
Sample ID: VS22 E SWC

Dilution: 5.000000X

Autosampler Location: 338
Date Collected: 11/27/2012 2:47:08 PM
Data Type: Original

Nebulizer Parameters: VS22 E SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VS22 E SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2351552.4	106.4	%	0.52				0.49%
ScR 361.383	307532.9	112.0	%	2.57				2.30%
Ag 328.068†	6.3	0.00008	mg/L	0.000209	0.00040	mg/L	0.001044	263.00%
Al 308.215†	92622.5	66.57	mg/L	1.903	332.8	mg/L	9.52	2.86%
As 188.979†	-43.4	0.03809	mg/L	0.005627	0.1904	mg/L	0.02814	14.78%
B 249.677†	74.0	0.01124	mg/L	0.001496	0.05621	mg/L	0.007478	13.30%
Ba 233.527†	6779.5	1.702	mg/L	0.0341	8.512	mg/L	0.1705	2.00%
Be 313.042†	981.1	0.00182	mg/L	0.000072	0.00911	mg/L	0.000361	3.96%
Ca 317.933†	337390.0	27.70	mg/L	0.844	138.5	mg/L	4.22	3.05%
Cd 228.802†	437.9	0.01692	mg/L	0.000267	0.08459	mg/L	0.001336	1.58%
Co 228.616†	1122.9	0.02786	mg/L	0.000416	0.1393	mg/L	0.00208	1.49%
Cr 267.716†	463.0	0.08412	mg/L	0.001123	0.4206	mg/L	0.00561	1.33%
Cu 324.752†	11834.6	0.05640	mg/L	0.000413	0.2820	mg/L	0.00207	0.73%
Fe 273.955†	90682.7	72.87	mg/L	2.137	364.3	mg/L	10.69	2.93%
K 766.490†	11041.8	6.341	mg/L	0.2114	31.71	mg/L	1.057	3.33%
Mg 279.077†	18568.3	15.66	mg/L	0.451	78.30	mg/L	2.256	2.88%
Mn 257.610†	126766.2	3.869	mg/L	0.1119	19.35	mg/L	0.559	2.89%
Mo 202.031†	58.9	0.00305	mg/L	0.000366	0.01523	mg/L	0.001830	12.02%
Na 589.592†	6585.8	0.6466	mg/L	0.01847	3.233	mg/L	0.0923	2.86%
Na 330.237†	21.2	1.059	mg/L	0.1562	5.297	mg/L	0.7811	14.75%
Ni 231.604†	267.0	0.07199	mg/L	0.001797	0.3600	mg/L	0.00899	2.50%
Pb 220.353†	5190.9	0.7434	mg/L	0.00586	3.717	mg/L	0.0293	0.79%
Sb 206.836†	11.2	0.00415	mg/L	0.001686	0.02077	mg/L	0.008430	40.58%
Se 196.026†	1.9	0.00136	mg/L	0.001287	0.00682	mg/L	0.006436	94.42%
Si 288.158†	1967.0	1.130	mg/L	0.0173	5.651	mg/L	0.0867	1.53%
Sn 189.927†	-33.3	-0.00603	mg/L	0.001347	-0.03017	mg/L	0.006735	22.33%
Sr 421.552†	188057.8	0.2577	mg/L	0.00732	1.289	mg/L	0.0366	2.84%
Ti 334.903†	41518.2	2.362	mg/L	0.0674	11.81	mg/L	0.337	2.85%
Tl 190.801†	3.8	0.00893	mg/L	0.000331	0.04466	mg/L	0.001654	3.70%
V 292.402†	13722.5	0.1266	mg/L	0.00109	0.6331	mg/L	0.00543	0.86%
Zn 206.200†	3418.2	0.9976	mg/L	0.01804	4.988	mg/L	0.0902	1.81%

Sequence No.: 14
Sample ID: VS22 F SWC

Autosampler Location: 339
Date Collected: 11/27/2012 2:51:09 PM
Data Type: Original

Dilution: 5.000000X

Nebulizer Parameters: VS22 F SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VS22 F SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2364852.3	107.0	%	0.40				0.38%
ScR 361.383	307168.6	111.8	%	1.03				0.92%
Ag 328.068†	-70.8	-0.00044	mg/L	0.000103	-0.00221	mg/L	0.000517	23.40%
Al 308.215†	130341.2	93.68	mg/L	1.164	468.4	mg/L	5.82	1.24%
As 188.979†	-67.1	0.04748	mg/L	0.001030	0.2374	mg/L	0.00515	2.17%
B 249.677†	66.2	0.01006	mg/L	0.001286	0.05028	mg/L	0.006430	12.79%
Ba 233.527†	5516.6	1.383	mg/L	0.0111	6.915	mg/L	0.0553	0.80%
Be 313.042†	3381.1	0.00641	mg/L	0.000091	0.03203	mg/L	0.000453	1.42%
Ca 317.933†	260337.0	21.37	mg/L	0.266	106.9	mg/L	1.33	1.25%
Cd 228.802†	365.7	0.01414	mg/L	0.000101	0.07068	mg/L	0.000507	0.72%
Co 228.616†	1124.5	0.02629	mg/L	0.000123	0.1315	mg/L	0.00062	0.47%
Cr 267.716†	365.4	0.06688	mg/L	0.001059	0.3344	mg/L	0.00529	1.58%
Cu 324.752†	34108.8	0.1575	mg/L	0.00088	0.7877	mg/L	0.00441	0.56%
Fe 273.955†	91651.2	73.65	mg/L	1.054	368.2	mg/L	5.27	1.43%
K 766.490†	8628.1	4.955	mg/L	0.0614	24.78	mg/L	0.307	1.24%
Mg 279.077†	14550.5	12.26	mg/L	0.156	61.31	mg/L	0.782	1.28%
Mn 257.610†	153121.2	4.673	mg/L	0.0666	23.37	mg/L	0.333	1.42%
Mo 202.031†	49.8	0.00260	mg/L	0.000443	0.01298	mg/L	0.002213	17.05%
Na 589.592†	8380.0	0.8227	mg/L	0.00972	4.114	mg/L	0.0486	1.18%
Na 330.237†	17.4	1.103	mg/L	0.3258	5.517	mg/L	1.6288	29.52%
Ni 231.604†	217.0	0.05852	mg/L	0.000707	0.2926	mg/L	0.00354	1.21%
Pb 220.353†	3242.4	0.4755	mg/L	0.00084	2.378	mg/L	0.0042	0.18%
Sb 206.836†	10.7	0.00460	mg/L	0.001143	0.02300	mg/L	0.005715	24.85%
Se 196.026†	2.7	0.00201	mg/L	0.005501	0.01003	mg/L	0.027507	274.23%
Si 288.158†	2173.5	1.248	mg/L	0.0115	6.241	mg/L	0.0575	0.92%
Sn 189.927†	-21.6	-0.00324	mg/L	0.001380	-0.01618	mg/L	0.006901	42.65%
Sr 421.552†	219423.5	0.3007	mg/L	0.00368	1.504	mg/L	0.0184	1.22%
Ti 334.903†	56382.3	3.209	mg/L	0.0424	16.05	mg/L	0.212	1.32%
Tl 190.801†	-2.5	0.00609	mg/L	0.000583	0.03045	mg/L	0.002915	9.57%
V 292.402†	12420.4	0.1139	mg/L	0.00017	0.5694	mg/L	0.00085	0.15%
Zn 206.200†	3352.5	0.9784	mg/L	0.00904	4.892	mg/L	0.0452	0.92%

Sequence No.: 15
Sample ID: VS22 G SWC

Dilution: 5.000000X

Autosampler Location: 340
Date Collected: 11/27/2012 2:55:08 PM
Data Type: Original

Nebulizer Parameters: VS22 G SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VS22 G SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2387215.6	108.0	%	0.57				0.53%
ScR 361.383	307097.6	111.8	%	0.24				0.22%
Ag 328.068†	11.4	0.00013	mg/L	0.000243	0.00063	mg/L	0.001217	193.90%
Al 308.215†	136860.6	98.36	mg/L	1.072	491.8	mg/L	5.36	1.09%
As 188.979†	-51.0	0.05849	mg/L	0.004403	0.2925	mg/L	0.02202	7.53%
B 249.677†	75.3	0.01141	mg/L	0.000668	0.05704	mg/L	0.003338	5.85%
Ba 233.527†	9037.9	2.269	mg/L	0.0186	11.35	mg/L	0.093	0.82%
Be 313.042†	1219.3	0.00226	mg/L	0.000024	0.01130	mg/L	0.000119	1.05%
Ca 317.933†	317368.6	26.06	mg/L	0.344	130.3	mg/L	1.72	1.32%
Cd 228.802†	521.1	0.02003	mg/L	0.000277	0.1001	mg/L	0.00138	1.38%
Co 228.616†	1580.5	0.03945	mg/L	0.000045	0.1973	mg/L	0.00022	0.11%
Cr 267.716†	582.8	0.1055	mg/L	0.00074	0.5273	mg/L	0.00369	0.70%
Cu 324.752†	21189.2	0.09978	mg/L	0.000570	0.4989	mg/L	0.00285	0.57%
Fe 273.955†	121673.4	97.77	mg/L	1.291	488.9	mg/L	6.46	1.32%
K 766.490†	13440.4	7.719	mg/L	0.0877	38.59	mg/L	0.438	1.14%
Mg 279.077†	28503.3	24.05	mg/L	0.226	120.2	mg/L	1.13	0.94%
Mn 257.610†	299774.9	9.150	mg/L	0.1119	45.75	mg/L	0.560	1.22%
Mo 202.031†	67.8	0.00357	mg/L	0.000559	0.01785	mg/L	0.002793	15.65%
Na 589.592†	10661.2	1.047	mg/L	0.0098	5.234	mg/L	0.0488	0.93%
Na 330.237†	33.0	1.560	mg/L	0.2140	7.800	mg/L	1.0700	13.72%
Ni 231.604†	334.3	0.09015	mg/L	0.000488	0.4508	mg/L	0.00244	0.54%
Pb 220.353†	5412.5	0.7811	mg/L	0.00132	3.906	mg/L	0.0066	0.17%
Sb 206.836†	17.2	0.00651	mg/L	0.003691	0.03253	mg/L	0.018454	56.72%
Se 196.026†	8.9	0.00679	mg/L	0.007810	0.03397	mg/L	0.039050	114.96%
Si 288.158†	2526.5	1.452	mg/L	0.0069	7.261	mg/L	0.0344	0.47%
Sn 189.927†	-27.6	-0.00443	mg/L	0.000428	-0.02216	mg/L	0.002138	9.65%
Sr 421.552†	233889.6	0.3205	mg/L	0.00333	1.603	mg/L	0.0167	1.04%
Ti 334.903†	57000.5	3.244	mg/L	0.0393	16.22	mg/L	0.196	1.21%
Tl 190.801†	-7.6	0.00604	mg/L	0.000491	0.03019	mg/L	0.002455	8.13%
V 292.402†	17892.8	0.1655	mg/L	0.00033	0.8277	mg/L	0.00164	0.20%
Zn 206.200†	5209.1	1.520	mg/L	0.0159	7.601	mg/L	0.0797	1.05%

Sequence No.: 16
Sample ID: VS22 H SWC

Autosampler Location: 341
Date Collected: 11/27/2012 2:59:07 PM
Data Type: Original

Dilution: 5.000000X

Nebulizer Parameters: VS22 H SWC

Analyte	Back Pressure	Flow
All	216.0 kPa	0.75 L/min

Mean Data: VS22 H SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2394924.3	108.3	%	0.29				0.27%
ScR 361.383	305821.3	111.3	%	0.43				0.39%
Ag 328.068†	-80.7	-0.00050	mg/L	0.000285	-0.00249	mg/L	0.001424	57.11%
Al 308.215†	112659.5	80.97	mg/L	0.497	404.8	mg/L	2.49	0.61%
As 188.979†	-50.0	0.06267	mg/L	0.003557	0.3133	mg/L	0.01778	5.68%
B 249.677†	62.9	0.00952	mg/L	0.000873	0.04760	mg/L	0.004365	9.17%
Ba 233.527†	6094.7	1.527	mg/L	0.0120	7.633	mg/L	0.0598	0.78%
Be 313.042†	1009.8	0.00186	mg/L	0.000009	0.00931	mg/L	0.000043	0.47%
Ca 317.933†	232853.3	19.12	mg/L	0.138	95.59	mg/L	0.688	0.72%
Cd 228.802†	334.7	0.01270	mg/L	0.000096	0.06350	mg/L	0.000482	0.76%
Co 228.616†	1450.2	0.03552	mg/L	0.000108	0.1776	mg/L	0.00054	0.30%
Cr 267.716†	506.6	0.09227	mg/L	0.000750	0.4613	mg/L	0.00375	0.81%
Cu 324.752†	13290.7	0.06353	mg/L	0.000656	0.3176	mg/L	0.00328	1.03%
Fe 273.955†	111207.8	89.36	mg/L	0.765	446.8	mg/L	3.82	0.86%
K 766.490†	11272.5	6.474	mg/L	0.0375	32.37	mg/L	0.188	0.58%
Mg 279.077†	21879.7	18.45	mg/L	0.147	92.25	mg/L	0.737	0.80%
Mn 257.610†	189679.5	5.790	mg/L	0.0451	28.95	mg/L	0.226	0.78%
Mo 202.031†	51.7	0.00273	mg/L	0.000254	0.01364	mg/L	0.001272	9.33%
Na 589.592†	9772.3	0.9594	mg/L	0.00605	4.797	mg/L	0.0303	0.63%
Na 330.237†	30.8	1.659	mg/L	0.1705	8.295	mg/L	0.8527	10.28%
Ni 231.604†	278.5	0.07510	mg/L	0.000522	0.3755	mg/L	0.00261	0.69%
Pb 220.353†	7291.3	1.042	mg/L	0.0032	5.208	mg/L	0.0159	0.30%
Sb 206.836†	22.5	0.00854	mg/L	0.000600	0.04271	mg/L	0.002999	7.02%
Se 196.026†	8.0	0.00610	mg/L	0.002951	0.03052	mg/L	0.014757	48.34%
Si 288.158†	2130.7	1.224	mg/L	0.0056	6.122	mg/L	0.0282	0.46%
Sn 189.927†	-21.1	-0.00335	mg/L	0.000278	-0.01674	mg/L	0.001391	8.31%
Sr 421.552†	129633.4	0.1777	mg/L	0.00115	0.8883	mg/L	0.00573	0.65%
Ti 334.903†	58911.9	3.353	mg/L	0.0228	16.77	mg/L	0.114	0.68%
Tl 190.801†	0.1	0.00880	mg/L	0.002089	0.04401	mg/L	0.010445	23.73%
V 292.402†	15910.8	0.1465	mg/L	0.00111	0.7324	mg/L	0.00555	0.76%
Zn 206.200†	3507.3	1.024	mg/L	0.0085	5.118	mg/L	0.0425	0.83%

Sequence No.: 17
Sample ID: VS22 I SWC

Dilution: 5.000000X

Autosampler Location: 342
Date Collected: 11/27/2012 3:03:07 PM
Data Type: Original

Nebulizer Parameters: VS22 I SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VS22 I SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2392933.0	108.2	%	0.33				0.30%
ScR 361.383	305293.9	111.2	%	0.65				0.59%
Ag 328.068†	-19.7	-0.00009	mg/L	0.000126	-0.00045	mg/L	0.000631	139.07%
Al 308.215†	143781.5	103.3	mg/L	0.52	516.7	mg/L	2.60	0.50%
As 188.979†	-79.6	0.04498	mg/L	0.002199	0.2249	mg/L	0.01100	4.89%
B 249.677†	64.7	0.00978	mg/L	0.001321	0.04890	mg/L	0.006607	13.51%
Ba 233.527†	6409.1	1.604	mg/L	0.0165	8.018	mg/L	0.0826	1.03%
Be 313.042†	1424.8	0.00266	mg/L	0.000029	0.01328	mg/L	0.000146	1.10%
Ca 317.933†	225284.1	18.50	mg/L	0.122	92.48	mg/L	0.609	0.66%
Cd 228.802†	215.0	0.00799	mg/L	0.000013	0.03994	mg/L	0.000063	0.16%
Co 228.616†	1736.8	0.04378	mg/L	0.000298	0.2189	mg/L	0.00149	0.68%
Cr 267.716†	594.0	0.1082	mg/L	0.00170	0.5409	mg/L	0.00852	1.58%
Cu 324.752†	16343.2	0.07806	mg/L	0.000780	0.3903	mg/L	0.00390	1.00%
Fe 273.955†	130028.8	104.5	mg/L	0.72	522.4	mg/L	3.58	0.69%
K 766.490†	11115.6	6.384	mg/L	0.0500	31.92	mg/L	0.250	0.78%
Mg 279.077†	21719.6	18.31	mg/L	0.207	91.54	mg/L	1.036	1.13%
Mn 257.610†	355989.5	10.87	mg/L	0.066	54.33	mg/L	0.331	0.61%
Mo 202.031†	67.2	0.00361	mg/L	0.000102	0.01807	mg/L	0.000508	2.81%
Na 589.592†	7523.6	0.7387	mg/L	0.00261	3.693	mg/L	0.0131	0.35%
Na 330.237†	13.5	1.103	mg/L	0.1831	5.516	mg/L	0.9153	16.59%
Ni 231.604†	498.0	0.1343	mg/L	0.00226	0.6716	mg/L	0.01129	1.68%
Pb 220.353†	1849.5	0.2808	mg/L	0.00098	1.404	mg/L	0.0049	0.35%
Sb 206.836†	10.2	0.00401	mg/L	0.001290	0.02006	mg/L	0.006451	32.16%
Se 196.026†	14.4	0.01111	mg/L	0.002081	0.05556	mg/L	0.010403	18.72%
Si 288.158†	1681.8	0.9669	mg/L	0.01064	4.834	mg/L	0.0532	1.10%
Sn 189.927†	-23.5	-0.00416	mg/L	0.000486	-0.02079	mg/L	0.002430	11.69%
Sr 421.552†	151647.4	0.2078	mg/L	0.00096	1.039	mg/L	0.0048	0.46%
Ti 334.903†	59712.9	3.399	mg/L	0.0147	16.99	mg/L	0.073	0.43%
Tl 190.801†	-12.6	0.00447	mg/L	0.002263	0.02234	mg/L	0.011313	50.64%
V 292.402†	15140.9	0.1395	mg/L	0.00141	0.6975	mg/L	0.00703	1.01%
Zn 206.200†	2206.9	0.6441	mg/L	0.00682	3.220	mg/L	0.0341	1.06%

Sequence No.: 18
Sample ID: VS22 J SWC

Dilution: 5.000000X

Autosampler Location: 343
Date Collected: 11/27/2012 3:07:06 PM
Data Type: Original

Nebulizer Parameters: VS22 J SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VS22 J SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2401228.4	108.6	%	0.13				0.12%
ScR 361.383	307527.4	112.0	%	1.12				1.00%
Ag 328.068†	24.7	0.00021	mg/L	0.000220	0.00104	mg/L	0.001101	105.90%
Al 308.215†	129885.2	93.35	mg/L	0.495	466.7	mg/L	2.47	0.53%
As 188.979†	-30.9	0.06717	mg/L	0.001927	0.3359	mg/L	0.00964	2.87%
B 249.677†	39.7	0.00597	mg/L	0.000497	0.02985	mg/L	0.002483	8.32%
Ba 233.527†	6526.9	1.635	mg/L	0.0176	8.175	mg/L	0.0880	1.08%
Be 313.042†	1180.3	0.00219	mg/L	0.000043	0.01096	mg/L	0.000214	1.95%
Ca 317.933†	264356.5	21.70	mg/L	0.102	108.5	mg/L	0.51	0.47%
Cd 228.802†	494.8	0.01894	mg/L	0.000124	0.09468	mg/L	0.000621	0.66%
Co 228.616†	1527.9	0.03828	mg/L	0.000266	0.1914	mg/L	0.00133	0.69%
Cr 267.716†	528.8	0.09598	mg/L	0.001543	0.4799	mg/L	0.00771	1.61%
Cu 324.752†	16914.2	0.08023	mg/L	0.000505	0.4011	mg/L	0.00252	0.63%
Fe 273.955†	116948.6	93.98	mg/L	0.417	469.9	mg/L	2.08	0.44%
K 766.490†	10125.1	5.815	mg/L	0.0717	29.07	mg/L	0.359	1.23%
Mg 279.077†	25947.7	21.89	mg/L	0.261	109.4	mg/L	1.30	1.19%
Mn 257.610†	241159.9	7.361	mg/L	0.0315	36.80	mg/L	0.157	0.43%
Mo 202.031†	77.2	0.00415	mg/L	0.000067	0.02076	mg/L	0.000333	1.60%
Na 589.592†	7582.9	0.7445	mg/L	0.00402	3.722	mg/L	0.0201	0.54%
Na 330.237†	20.3	1.108	mg/L	0.2821	5.539	mg/L	1.4104	25.47%
Ni 231.604†	332.5	0.08967	mg/L	0.000782	0.4484	mg/L	0.00391	0.87%
Pb 220.353†	5745.0	0.8269	mg/L	0.00291	4.134	mg/L	0.0146	0.35%
Sb 206.836†	21.2	0.00790	mg/L	0.000647	0.03949	mg/L	0.003236	8.20%
Se 196.026†	1.6	0.00114	mg/L	0.004830	0.00569	mg/L	0.024150	424.24%
Si 288.158†	3552.8	2.040	mg/L	0.0314	10.20	mg/L	0.157	1.54%
Sn 189.927†	-23.3	-0.00371	mg/L	0.001372	-0.01857	mg/L	0.006859	36.93%
Sr 421.552†	170266.3	0.2333	mg/L	0.00139	1.167	mg/L	0.0069	0.59%
Ti 334.903†	54223.5	3.086	mg/L	0.0157	15.43	mg/L	0.079	0.51%
Tl 190.801†	-2.3	0.00817	mg/L	0.003417	0.04085	mg/L	0.017084	41.82%
V 292.402†	15474.8	0.1426	mg/L	0.00058	0.7131	mg/L	0.00289	0.40%
Zn 206.200†	4227.8	1.234	mg/L	0.0132	6.170	mg/L	0.0662	1.07%

Sequence No.: 19
Sample ID: VS22 K SWC

Autosampler Location: 344
Date Collected: 11/27/2012 3:11:05 PM
Data Type: Original

Dilution: 5.000000X

Nebulizer Parameters: VS22 K SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VS22 K SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2419803.8	109.4	%	0.33				0.30%
ScR 361.383	306853.0	111.7	%	0.86				0.77%
Ag 328.068†	-58.5	-0.00034	mg/L	0.000180	-0.00171	mg/L	0.000901	52.62%
Al 308.215†	115636.1	83.11	mg/L	0.539	415.5	mg/L	2.69	0.65%
As 188.979†	-133.3	0.01938	mg/L	0.001422	0.09691	mg/L	0.007111	7.34%
B 249.677†	48.3	0.00729	mg/L	0.000304	0.03645	mg/L	0.001522	4.17%
Ba 233.527†	4348.3	1.085	mg/L	0.0098	5.423	mg/L	0.0489	0.90%
Be 313.042†	1540.2	0.00287	mg/L	0.000041	0.01433	mg/L	0.000206	1.44%
Ca 317.933†	313460.3	25.74	mg/L	0.216	128.7	mg/L	1.08	0.84%
Cd 228.802†	239.7	0.00925	mg/L	0.000192	0.04627	mg/L	0.000958	2.07%
Co 228.616†	1437.3	0.03444	mg/L	0.000322	0.1722	mg/L	0.00161	0.94%
Cr 267.716†	522.8	0.09512	mg/L	0.000289	0.4756	mg/L	0.00144	0.30%
Cu 324.752†	19464.8	0.09157	mg/L	0.000445	0.4578	mg/L	0.00223	0.49%
Fe 273.955†	113576.3	91.27	mg/L	0.926	456.3	mg/L	4.63	1.02%
K 766.490†	8481.4	4.871	mg/L	0.0295	24.35	mg/L	0.148	0.61%
Mg 279.077†	25985.9	21.92	mg/L	0.145	109.6	mg/L	0.72	0.66%
Mn 257.610†	110436.3	3.371	mg/L	0.0318	16.85	mg/L	0.159	0.94%
Mo 202.031†	53.0	0.00273	mg/L	0.000048	0.01364	mg/L	0.000241	1.77%
Na 589.592†	7974.3	0.7829	mg/L	0.00540	3.915	mg/L	0.0270	0.69%
Na 330.237†	10.5	1.051	mg/L	0.1676	5.255	mg/L	0.8379	15.95%
Ni 231.604†	239.3	0.06455	mg/L	0.000210	0.3227	mg/L	0.00105	0.33%
Pb 220.353†	2675.5	0.3926	mg/L	0.00152	1.963	mg/L	0.0076	0.39%
Sb 206.836†	7.4	0.00343	mg/L	0.001753	0.01717	mg/L	0.008766	51.05%
Se 196.026†	10.5	0.00802	mg/L	0.003281	0.04008	mg/L	0.016403	40.92%
Si 288.158†	2375.8	1.365	mg/L	0.0104	6.827	mg/L	0.0520	0.76%
Sn 189.927†	-31.4	-0.00553	mg/L	0.000808	-0.02764	mg/L	0.004038	14.61%
Sr 421.552†	379107.5	0.5196	mg/L	0.00365	2.598	mg/L	0.0182	0.70%
Ti 334.903†	65376.7	3.721	mg/L	0.0247	18.60	mg/L	0.124	0.66%
Tl 190.801†	-7.1	0.00556	mg/L	0.000647	0.02781	mg/L	0.003237	11.64%
V 292.402†	18411.3	0.1695	mg/L	0.00083	0.8473	mg/L	0.00416	0.49%
Zn 206.200†	2233.4	0.6518	mg/L	0.00672	3.259	mg/L	0.0336	1.03%

Sequence No.: 20
Sample ID: VS22 L SWC

Autosampler Location: 345
Date Collected: 11/27/2012 3:15:05 PM
Data Type: Original

Dilution: 5.000000X

Nebulizer Parameters: VS22 L SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VS22 L SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2385751.4	107.9	%	0.64				0.59%
ScR 361.383	299584.2	109.1	%	0.25				0.23%
Ag 328.068†	-47.2	-0.00028	mg/L	0.000427	-0.00142	mg/L	0.002137	150.65%
Al 308.215†	71454.7	51.35	mg/L	0.290	256.8	mg/L	1.45	0.57%
As 188.979†	-62.1	0.02877	mg/L	0.000791	0.1439	mg/L	0.00395	2.75%
B 249.677†	164.9	0.02514	mg/L	0.000226	0.1257	mg/L	0.00113	0.90%
Ba 233.527†	4592.7	1.151	mg/L	0.0061	5.755	mg/L	0.0307	0.53%
Be 313.042†	1000.4	0.00186	mg/L	0.000016	0.00930	mg/L	0.000080	0.86%
Ca 317.933†	1105689.6	90.78	mg/L	0.246	453.9	mg/L	1.23	0.27%
Cd 228.802†	407.9	0.01589	mg/L	0.000213	0.07946	mg/L	0.001067	1.34%
Co 228.616†	1102.5	0.02699	mg/L	0.000427	0.1350	mg/L	0.00214	1.58%
Cr 267.716†	485.4	0.08695	mg/L	0.000394	0.4348	mg/L	0.00197	0.45%
Cu 324.752†	27469.1	0.1270	mg/L	0.00179	0.6350	mg/L	0.00896	1.41%
Fe 273.955†	79011.8	63.49	mg/L	0.364	317.5	mg/L	1.82	0.57%
K 766.490†	9472.3	5.440	mg/L	0.0445	27.20	mg/L	0.222	0.82%
Mg 279.077†	21050.5	17.76	mg/L	0.096	88.82	mg/L	0.482	0.54%
Mn 257.610†	153052.2	4.671	mg/L	0.0318	23.36	mg/L	0.159	0.68%
Mo 202.031†	96.1	0.00448	mg/L	0.000304	0.02240	mg/L	0.001520	6.79%
Na 589.592†	10784.6	1.059	mg/L	0.0032	5.294	mg/L	0.0162	0.31%
Na 330.237†	30.2	1.424	mg/L	0.2440	7.121	mg/L	1.2202	17.13%
Ni 231.604†	229.0	0.06176	mg/L	0.000246	0.3088	mg/L	0.00123	0.40%
Pb 220.353†	4582.9	0.6545	mg/L	0.00705	3.272	mg/L	0.0353	1.08%
Sb 206.836†	15.3	0.00553	mg/L	0.003832	0.02764	mg/L	0.019160	69.32%
Se 196.026†	-7.6	-0.00597	mg/L	0.005793	-0.02984	mg/L	0.028967	97.06%
Si 288.158†	2105.2	1.210	mg/L	0.0018	6.049	mg/L	0.0089	0.15%
Sn 189.927†	-52.2	-0.00376	mg/L	0.001115	-0.01882	mg/L	0.005574	29.61%
Sr 421.552†	666046.1	0.9128	mg/L	0.00142	4.564	mg/L	0.0071	0.16%
Ti 334.903†	45433.2	2.582	mg/L	0.0150	12.91	mg/L	0.075	0.58%
Tl 190.801†	12.2	0.01191	mg/L	0.002231	0.05955	mg/L	0.011153	18.73%
V 292.402†	12335.2	0.1139	mg/L	0.00159	0.5694	mg/L	0.00795	1.40%
Zn 206.200†	3862.7	1.127	mg/L	0.0047	5.637	mg/L	0.0237	0.42%

Sequence No.: 21
Sample ID: CV 10

Autosampler Location: 7
Date Collected: 11/27/2012 3:19:19 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2351694.9	106.4	%	0.99				0.93%
ScR 361.383	297514.0	108.3	%	1.45				1.34%
Ag 328.068†	153080.2	1.029	mg/L	0.0108	1.029	mg/L	0.0108	1.05%
Al 308.215†	2778.4	1.963	mg/L	0.0136	1.963	mg/L	0.0136	0.69%
As 188.979†	3179.3	2.067	mg/L	0.0332	2.067	mg/L	0.0332	1.60%
B 249.677†	6275.0	0.9580	mg/L	0.01414	0.9580	mg/L	0.01414	1.48%
Ba 233.527†	3903.9	0.9867	mg/L	0.01214	0.9867	mg/L	0.01214	1.23%
Be 313.042†	514447.6	0.9838	mg/L	0.01120	0.9838	mg/L	0.01120	1.14%
Ca 317.933†	24896.9	2.044	mg/L	0.0299	2.044	mg/L	0.0299	1.46%
Cd 228.802†	26151.7	1.025	mg/L	0.0130	1.025	mg/L	0.0130	1.27%
Co 228.616†	33674.6	1.003	mg/L	0.0123	1.003	mg/L	0.0123	1.23%
Cr 267.716†	5596.9	1.006	mg/L	0.0121	1.006	mg/L	0.0121	1.20%
Cu 324.752†	221361.8	1.006	mg/L	0.0111	1.006	mg/L	0.0111	1.10%
Fe 273.955†	2552.7	2.044	mg/L	0.0297	2.044	mg/L	0.0297	1.45%
K 766.490†	34552.3	19.84	mg/L	0.328	19.84	mg/L	0.328	1.65%
Mg 279.077†	2341.8	1.987	mg/L	0.0252	1.987	mg/L	0.0252	1.27%
Mn 257.610†	33648.7	1.027	mg/L	0.0151	1.027	mg/L	0.0151	1.47%
Mo 202.031†	17589.4	1.000	mg/L	0.0121	1.000	mg/L	0.0121	1.21%
Na 589.592†	496393.0	48.74	mg/L	0.638	48.74	mg/L	0.638	1.31%
Na 330.237†	1291.9	51.61	mg/L	0.957	51.61	mg/L	0.957	1.85%
Ni 231.604†	3599.0	0.9709	mg/L	0.01182	0.9709	mg/L	0.01182	1.22%
Pb 220.353†	14217.5	2.001	mg/L	0.0250	2.001	mg/L	0.0250	1.25%
Sb 206.836†	6070.8	2.120	mg/L	0.0308	2.120	mg/L	0.0308	1.45%
Se 196.026†	2555.2	1.983	mg/L	0.0308	1.983	mg/L	0.0308	1.55%
Si 288.158†	3658.4	2.098	mg/L	0.0255	2.098	mg/L	0.0255	1.21%
Sn 189.927†	3481.5	1.028	mg/L	0.0149	1.028	mg/L	0.0149	1.45%
Sr 421.552†	704808.0	0.9659	mg/L	0.01382	0.9659	mg/L	0.01382	1.43%
Ti 334.903†	18759.0	1.067	mg/L	0.0155	1.067	mg/L	0.0155	1.45%
Tl 190.801†	4269.6	1.989	mg/L	0.0295	1.989	mg/L	0.0295	1.48%
V 292.402†	103969.6	0.9860	mg/L	0.01217	0.9860	mg/L	0.01217	1.23%
Zn 206.200†	3518.2	1.027	mg/L	0.0168	1.027	mg/L	0.0168	1.64%

Sequence No.: 22
Sample ID: CB 7

Autosampler Location: 1
Date Collected: 11/27/2012 3:23:39 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2359509.2	106.7	%	0.30				0.28%
ScR 361.383	296045.4	107.8	%	0.82				0.76%
Ag 328.068†	-30.1	-0.00020	mg/L	0.000145	-0.00020	mg/L	0.000145	71.71%
Al 308.215†	-5.4	-0.00385	mg/L	0.002933	-0.00385	mg/L	0.002933	76.16%
As 188.979†	5.1	0.00324	mg/L	0.001315	0.00324	mg/L	0.001315	40.65%
B 249.677†	8.9	0.00136	mg/L	0.001624	0.00136	mg/L	0.001624	119.13%
Ba 233.527†	0.7	0.00017	mg/L	0.000835	0.00017	mg/L	0.000835	483.77%
Be 313.042†	-11.4	-0.00002	mg/L	0.000012	-0.00002	mg/L	0.000012	53.46%
Ca 317.933†	1.6	0.00013	mg/L	0.000945	0.00013	mg/L	0.000945	719.11%
Cd 228.802†	-6.7	-0.00029	mg/L	0.000107	-0.00029	mg/L	0.000107	37.06%
Co 228.616†	8.7	0.00026	mg/L	0.000158	0.00026	mg/L	0.000158	60.78%
Cr 267.716†	5.3	0.00096	mg/L	0.000526	0.00096	mg/L	0.000526	55.00%
Cu 324.752†	-797.7	-0.00363	mg/L	0.000043	-0.00363	mg/L	0.000043	1.18%
Fe 273.955†	-1.2	-0.00098	mg/L	0.000813	-0.00098	mg/L	0.000813	82.88%
K 766.490†	-32.3	-0.01853	mg/L	0.005040	-0.01853	mg/L	0.005040	27.19%
Mg 279.077†	-2.9	-0.00242	mg/L	0.003151	-0.00242	mg/L	0.003151	130.31%
Mn 257.610†	5.6	0.00017	mg/L	0.000037	0.00017	mg/L	0.000037	21.31%
Mo 202.031†	4.1	0.00023	mg/L	0.000332	0.00023	mg/L	0.000332	143.21%
Na 589.592†	58.4	0.00574	mg/L	0.005052	0.00574	mg/L	0.005052	88.09%
Na 330.237†	2.9	0.1164	mg/L	0.23288	0.1164	mg/L	0.23288	200.03%
Ni 231.604†	3.5	0.00094	mg/L	0.001483	0.00094	mg/L	0.001483	157.56%
Pb 220.353†	9.1	0.00128	mg/L	0.000550	0.00128	mg/L	0.000550	42.81%
Sb 206.836†	-1.3	-0.00046	mg/L	0.000837	-0.00046	mg/L	0.000837	182.15%
Se 196.026†	-4.7	-0.00363	mg/L	0.001580	-0.00363	mg/L	0.001580	43.55%
Si 288.158†	-3.7	-0.00210	mg/L	0.002617	-0.00210	mg/L	0.002617	124.49%
Sn 189.927†	2.7	0.00079	mg/L	0.001544	0.00079	mg/L	0.001544	195.28%
Sr 421.552†	80.7	0.00011	mg/L	0.000027	0.00011	mg/L	0.000027	24.67%
Ti 334.903†	-9.4	-0.00053	mg/L	0.000760	-0.00053	mg/L	0.000760	142.41%
Tl 190.801†	9.0	0.00422	mg/L	0.000937	0.00422	mg/L	0.000937	22.22%
V 292.402†	7.5	0.00008	mg/L	0.000084	0.00008	mg/L	0.000084	111.01%
Zn 206.200†	-1.4	-0.00041	mg/L	0.000751	-0.00041	mg/L	0.000751	183.32%

Sequence No.: 23
Sample ID: CRI

Autosampler Location: 301
Date Collected: 11/27/2012 3:27:53 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CRI

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CRI

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2347879.1	106.2	%	1.30				1.23%
ScR 361.383	298076.8	108.5	%	1.26				1.16%
Ag 328.068†	442.2	0.00297	mg/L	0.000022	0.00297	mg/L	0.000022	0.75%
Al 308.215†	58.3	0.04176	mg/L	0.003169	0.04176	mg/L	0.003169	7.59%
As 188.979†	78.4	0.05039	mg/L	0.000187	0.05039	mg/L	0.000187	0.37%
B 249.677†	129.2	0.01974	mg/L	0.001423	0.01974	mg/L	0.001423	7.21%
Ba 233.527†	11.3	0.00284	mg/L	0.000821	0.00284	mg/L	0.000821	28.87%
Be 313.042†	472.0	0.00090	mg/L	0.000013	0.00090	mg/L	0.000013	1.44%
Ca 317.933†	599.1	0.04919	mg/L	0.001144	0.04919	mg/L	0.001144	2.33%
Cd 228.802†	54.2	0.00183	mg/L	0.000231	0.00183	mg/L	0.000231	12.67%
Co 228.616†	127.1	0.00379	mg/L	0.000035	0.00379	mg/L	0.000035	0.92%
Cr 267.716†	31.5	0.00565	mg/L	0.000591	0.00565	mg/L	0.000591	10.45%
Cu 324.752†	-358.9	-0.00163	mg/L	0.000137	-0.00163	mg/L	0.000137	8.38%
Fe 273.955†	62.0	0.04980	mg/L	0.000618	0.04980	mg/L	0.000618	1.24%
K 766.490†	784.4	0.4505	mg/L	0.03770	0.4505	mg/L	0.03770	8.37%
Mg 279.077†	56.5	0.04776	mg/L	0.007262	0.04776	mg/L	0.007262	15.21%
Mn 257.610†	37.3	0.00114	mg/L	0.000156	0.00114	mg/L	0.000156	13.67%
Mo 202.031†	87.7	0.00499	mg/L	0.000100	0.00499	mg/L	0.000100	2.00%
Na 589.592†	4730.0	0.4644	mg/L	0.00398	0.4644	mg/L	0.00398	0.86%
Na 330.237†	16.4	0.6549	mg/L	0.59514	0.6549	mg/L	0.59514	90.88%
Ni 231.604†	38.0	0.01026	mg/L	0.002040	0.01026	mg/L	0.002040	19.87%
Pb 220.353†	147.0	0.02071	mg/L	0.000496	0.02071	mg/L	0.000496	2.39%
Sb 206.836†	140.8	0.04921	mg/L	0.000758	0.04921	mg/L	0.000758	1.54%
Se 196.026†	61.2	0.04753	mg/L	0.001930	0.04753	mg/L	0.001930	4.06%
Si 288.158†	110.1	0.06312	mg/L	0.002676	0.06312	mg/L	0.002676	4.24%
Sn 189.927†	34.6	0.01022	mg/L	0.000494	0.01022	mg/L	0.000494	4.84%
Sr 421.552†	699.7	0.00096	mg/L	0.000052	0.00096	mg/L	0.000052	5.44%
Ti 334.903†	55.1	0.00313	mg/L	0.001299	0.00313	mg/L	0.001299	41.48%
Tl 190.801†	111.9	0.05235	mg/L	0.001142	0.05235	mg/L	0.001142	2.18%
V 292.402†	317.1	0.00302	mg/L	0.000165	0.00302	mg/L	0.000165	5.47%
Zn 206.200†	33.3	0.00973	mg/L	0.000681	0.00973	mg/L	0.000681	7.00%

Sequence No.: 24
Sample ID: ICSA

Autosampler Location: 302
Date Collected: 11/27/2012 3:32:08 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2331685.5	105.5	%	0.66				0.63%
ScR 361.383	293622.7	106.9	%	0.20				0.19%
Ag 328.068†	-178.9	-0.00120	mg/L	0.000301	-0.00120	mg/L	0.000301	25.11%
Al 308.215†	272104.4	195.6	mg/L	0.96	195.6	mg/L	0.96	0.49%
As 188.979†	30.3	0.01385	mg/L	0.001543	0.01385	mg/L	0.001543	11.14%
B 249.677†	-33.7	-0.00515	mg/L	0.001699	-0.00515	mg/L	0.001699	33.01%
Ba 233.527†	113.1	-0.00342	mg/L	0.000052	-0.00342	mg/L	0.000052	1.52%
Be 313.042†	25.7	0.00005	mg/L	0.000016	0.00005	mg/L	0.000016	33.41%
Ca 317.933†	1199905.4	98.52	mg/L	0.928	98.52	mg/L	0.928	0.94%
Cd 228.802†	43.8	-0.00025	mg/L	0.000020	-0.00025	mg/L	0.000020	8.11%
Co 228.616†	67.2	-0.00055	mg/L	0.000148	-0.00055	mg/L	0.000148	26.89%
Cr 267.716†	13.0	0.00031	mg/L	0.000618	0.00031	mg/L	0.000618	201.67%
Cu 324.752†	-2566.4	-0.00388	mg/L	0.000039	-0.00388	mg/L	0.000039	1.00%
Fe 273.955†	243351.2	195.6	mg/L	2.58	195.6	mg/L	2.58	1.32%
K 766.490†	-22.4	-0.01288	mg/L	0.016615	-0.01288	mg/L	0.016615	128.98%
Mg 279.077†	120557.0	101.8	mg/L	0.31	101.8	mg/L	0.31	0.31%
Mn 257.610†	38.6	0.00116	mg/L	0.000293	0.00116	mg/L	0.000293	25.18%
Mo 202.031†	50.0	0.00178	mg/L	0.000294	0.00178	mg/L	0.000294	16.55%
Na 589.592†	138.8	0.01363	mg/L	0.003605	0.01363	mg/L	0.003605	26.45%
Na 330.237†	8.7	0.3486	mg/L	0.32708	0.3486	mg/L	0.32708	93.84%
Ni 231.604†	4.5	0.00122	mg/L	0.000795	0.00122	mg/L	0.000795	65.15%
Pb 220.353†	-304.6	-0.00409	mg/L	0.002380	-0.00409	mg/L	0.002380	58.20%
Sb 206.836†	29.7	0.01021	mg/L	0.001660	0.01021	mg/L	0.001660	16.25%
Se 196.026†	10.0	0.00774	mg/L	0.003799	0.00774	mg/L	0.003799	49.11%
Si 288.158†	-23.9	-0.00136	mg/L	0.001626	-0.00136	mg/L	0.001626	119.93%
Sn 189.927†	-67.1	-0.00760	mg/L	0.002590	-0.00760	mg/L	0.002590	34.05%
Sr 421.552†	2856.8	0.00392	mg/L Conf.	0.000019	0.00392	mg/L	0.000019	0.49%
Ti 334.903†	90.2	0.00043	mg/L	0.000281	0.00043	mg/L	0.000281	65.66%
Tl 190.801†	-32.1	0.00586	mg/L	0.002216	0.00586	mg/L	0.002216	37.84%
V 292.402†	1241.0	0.00489	mg/L	0.000165	0.00489	mg/L	0.000165	3.36%
Zn 206.200†	9.4	0.00274	mg/L	0.000479	0.00274	mg/L	0.000479	17.47%

Sequence No.: 25
Sample ID: ICSAB

Autosampler Location: 303
Date Collected: 11/27/2012 3:36:23 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	216.0 kPa	0.75 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2362066.1	106.8	%	0.26				0.25%
ScR 361.383	296370.7	107.9	%	0.67				0.62%
Ag 328.068†	148327.3	0.9967	mg/L	0.00218	0.9967	mg/L	0.00218	0.22%
Al 308.215†	269907.1	194.0	mg/L	0.87	194.0	mg/L	0.87	0.45%
As 188.979†	1602.3	1.022	mg/L	0.0070	1.022	mg/L	0.0070	0.68%
B 249.677†	-8.7	-0.00327	mg/L	0.001180	-0.00327	mg/L	0.001180	36.12%
Ba 233.527†	4010.8	0.9821	mg/L	0.00330	0.9821	mg/L	0.00330	0.34%
Be 313.042†	515139.1	0.9851	mg/L	0.00462	0.9851	mg/L	0.00462	0.47%
Ca 317.933†	1198555.1	98.41	mg/L	0.486	98.41	mg/L	0.486	0.49%
Cd 228.802†	25432.3	1.001	mg/L	0.0021	1.001	mg/L	0.0021	0.21%
Co 228.616†	31584.6	0.9403	mg/L	0.00147	0.9403	mg/L	0.00147	0.16%
Cr 267.716†	5628.4	1.010	mg/L	0.0036	1.010	mg/L	0.0036	0.36%
Cu 324.752†	213762.0	0.9797	mg/L	0.00112	0.9797	mg/L	0.00112	0.11%
Fe 273.955†	242841.4	195.1	mg/L	0.93	195.1	mg/L	0.93	0.48%
K 766.490†	-116.6	-0.06695	mg/L	0.009025	-0.06695	mg/L	0.009025	13.48%
Mg 279.077†	115297.6	97.38	mg/L	0.537	97.38	mg/L	0.537	0.55%
Mn 257.610†	31846.7	0.9722	mg/L	0.00395	0.9722	mg/L	0.00395	0.41%
Mo 202.031†	47.3	0.00157	mg/L	0.000422	0.00157	mg/L	0.000422	26.86%
Na 589.592†	267.7	0.02628	mg/L	0.002256	0.02628	mg/L	0.002256	8.59%
Na 330.237†	23.0	0.6073	mg/L	0.18615	0.6073	mg/L	0.18615	30.65%
Ni 231.604†	3492.5	0.9420	mg/L	0.00370	0.9420	mg/L	0.00370	0.39%
Pb 220.353†	6572.8	0.9638	mg/L	0.00556	0.9638	mg/L	0.00556	0.58%
Sb 206.836†	2899.7	1.002	mg/L	0.0084	1.002	mg/L	0.0084	0.84%
Se 196.026†	1259.0	0.9767	mg/L	0.00513	0.9767	mg/L	0.00513	0.53%
Si 288.158†	-35.2	-0.00477	mg/L	0.000240	-0.00477	mg/L	0.000240	5.02%
Sn 189.927†	-71.1	-0.00829	mg/L	0.000713	-0.00829	mg/L	0.000713	8.60%
Sr 421.552†	2826.6	0.00387	mg/L	Conf. 0.000047	0.00387	mg/L	0.000047	1.22%
Ti 334.903†	98.5	0.00071	mg/L	0.000050	0.00071	mg/L	0.000050	7.16%
Tl 190.801†	1934.7	0.9172	mg/L	0.00278	0.9172	mg/L	0.00278	0.30%
V 292.402†	99216.3	0.9344	mg/L	0.00028	0.9344	mg/L	0.00028	0.03%
Zn 206.200†	3282.6	0.9580	mg/L	0.00201	0.9580	mg/L	0.00201	0.21%

Sequence No.: 26
Sample ID: CV))
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 11/27/2012 3:40:12 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2376416.7	107.5	%	0.73				0.68%
ScR 361.383	299261.6	109.0	%	2.08				1.91%
Ag 328.068†	151962.4	1.021	mg/L	0.0054	1.021	mg/L	0.0054	0.53%
Al 308.215†	2819.6	1.993	mg/L	0.0328	1.993	mg/L	0.0328	1.65%
As 188.979†	3174.9	2.063	mg/L	0.0165	2.063	mg/L	0.0165	0.80%
B 249.677†	6312.5	0.9637	mg/L	0.02024	0.9637	mg/L	0.02024	2.10%
Ba 233.527†	3914.1	0.9893	mg/L	0.01918	0.9893	mg/L	0.01918	1.94%
Be 313.042†	514946.3	0.9847	mg/L	0.03423	0.9847	mg/L	0.03423	3.48%
Ca 317.933†	23571.4	1.935	mg/L	0.0611	1.935	mg/L	0.0611	3.16%
Cd 228.802†	25920.8	1.015	mg/L	0.0050	1.015	mg/L	0.0050	0.49%
Co 228.616†	33399.3	0.9951	mg/L	0.00329	0.9951	mg/L	0.00329	0.33%
Cr 267.716†	5622.8	1.011	mg/L	0.0198	1.011	mg/L	0.0198	1.96%
Cu 324.752†	218378.7	0.9923	mg/L	0.00728	0.9923	mg/L	0.00728	0.73%
Fe 273.955†	2580.5	2.067	mg/L	0.0334	2.067	mg/L	0.0334	1.62%
K 766.490†	33903.8	19.47	mg/L	0.587	19.47	mg/L	0.587	3.02%
Mg 279.077†	2377.5	2.017	mg/L	0.0427	2.017	mg/L	0.0427	2.12%
Mn 257.610†	32150.0	0.9816	mg/L	0.03034	0.9816	mg/L	0.03034	3.09%
Mo 202.031†	17435.3	0.9914	mg/L	0.00562	0.9914	mg/L	0.00562	0.57%
Na 589.592†	488534.6	47.96	mg/L	1.569	47.96	mg/L	1.569	3.27%
Na 330.237†	1297.6	51.82	mg/L	1.073	51.82	mg/L	1.073	2.07%
Ni 231.604†	3619.6	0.9764	mg/L	0.02088	0.9764	mg/L	0.02088	2.14%
Pb 220.353†	14086.1	1.983	mg/L	0.0059	1.983	mg/L	0.0059	0.30%
Sb 206.836†	6065.9	2.118	mg/L	0.0181	2.118	mg/L	0.0181	0.85%
Se 196.026†	2562.2	1.989	mg/L	0.0189	1.989	mg/L	0.0189	0.95%
Si 288.158†	3663.9	2.101	mg/L	0.0442	2.101	mg/L	0.0442	2.10%
Sn 189.927†	3481.7	1.028	mg/L	0.0079	1.028	mg/L	0.0079	0.76%
Sr 421.552†	692725.3	0.9494	mg/L	0.02969	0.9494	mg/L	0.02969	3.13%
Ti 334.903†	17875.6	1.017	mg/L	0.0314	1.017	mg/L	0.0314	3.09%
Tl 190.801†	4277.0	1.993	mg/L	0.0107	1.993	mg/L	0.0107	0.54%
V 292.402†	103119.3	0.9780	mg/L	0.00469	0.9780	mg/L	0.00469	0.48%
Zn 206.200†	3527.0	1.029	mg/L	0.0205	1.029	mg/L	0.0205	1.99%

Sequence No.: 27
Sample ID: CB 8

Autosampler Location: 1
Date Collected: 11/27/2012 3:45:16 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2390919.7	108.1	%	0.54				0.50%
ScR 361.383	297583.6	108.3	%	0.55				0.50%
Ag 328.068†	8.0	0.00005	mg/L	0.000147	0.00005	mg/L	0.000147	271.70%
Al 308.215†	-2.6	-0.00190	mg/L	0.006848	-0.00190	mg/L	0.006848	360.34%
As 188.979†	0.9	0.00059	mg/L	0.002235	0.00059	mg/L	0.002235	381.60%
B 249.677†	6.0	0.00091	mg/L	0.000297	0.00091	mg/L	0.000297	32.52%
Ba 233.527†	0.7	0.00018	mg/L	0.001000	0.00018	mg/L	0.001000	554.75%
Be 313.042†	13.5	0.00003	mg/L	0.000057	0.00003	mg/L	0.000057	221.20%
Ca 317.933†	4.5	0.00037	mg/L	0.000218	0.00037	mg/L	0.000218	59.10%
Cd 228.802†	-4.1	-0.00016	mg/L	0.000104	-0.00016	mg/L	0.000104	63.70%
Co 228.616†	9.7	0.00029	mg/L	0.000213	0.00029	mg/L	0.000213	73.49%
Cr 267.716†	4.2	0.00076	mg/L	0.000580	0.00076	mg/L	0.000580	75.91%
Cu 324.752†	-717.1	-0.00326	mg/L	0.000056	-0.00326	mg/L	0.000056	1.71%
Fe 273.955†	1.6	0.00129	mg/L	0.002461	0.00129	mg/L	0.002461	190.68%
K 766.490†	-48.4	-0.02780	mg/L	0.011926	-0.02780	mg/L	0.011926	42.89%
Mg 279.077†	-5.1	-0.00433	mg/L	0.001782	-0.00433	mg/L	0.001782	41.15%
Mn 257.610†	7.4	0.00023	mg/L	0.000064	0.00023	mg/L	0.000064	28.23%
Mo 202.031†	2.5	0.00014	mg/L	0.000196	0.00014	mg/L	0.000196	140.32%
Na 589.592†	55.7	0.00547	mg/L	0.001632	0.00547	mg/L	0.001632	29.84%
Na 330.237†	16.5	0.6590	mg/L	0.43329	0.6590	mg/L	0.43329	65.75%
Ni 231.604†	5.1	0.00138	mg/L	0.001600	0.00138	mg/L	0.001600	115.93%
Pb 220.353†	4.9	0.00070	mg/L	0.001187	0.00070	mg/L	0.001187	170.27%
Sb 206.836†	1.1	0.00039	mg/L	0.001794	0.00039	mg/L	0.001794	460.32%
Se 196.026†	-3.7	-0.00291	mg/L	0.002524	-0.00291	mg/L	0.002524	86.71%
Si 288.158†	-4.7	-0.00272	mg/L	0.004363	-0.00272	mg/L	0.004363	160.70%
Sn 189.927†	4.3	0.00128	mg/L	0.001279	0.00128	mg/L	0.001279	99.93%
Sr 421.552†	52.5	0.00007	mg/L	0.000065	0.00007	mg/L	0.000065	90.54%
Ti 334.903†	-7.5	-0.00043	mg/L	0.000142	-0.00043	mg/L	0.000142	33.20%
Tl 190.801†	7.2	0.00335	mg/L	0.000645	0.00335	mg/L	0.000645	19.27%
V 292.402†	13.2	0.00013	mg/L	0.000142	0.00013	mg/L	0.000142	110.90%
Zn 206.200†	0.1	0.00002	mg/L	0.000067	0.00002	mg/L	0.000067	283.84%

Sequence No.: 28
Sample ID: VS22 MB1 SWC

Autosampler Location: 346
Date Collected: 11/27/2012 3:49:31 PM
Data Type: Original

Dilution: 2.000000X

Nebulizer Parameters: VS22 MB1 SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VS22 MB1 SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2388589.0	108.0	%	0.45				0.41%
ScR 361.383	300100.9	109.3	%	0.92				0.84%
Ag 328.068†	15.7	0.00011	mg/L	0.000083	0.00021	mg/L	0.000166	78.65%
Al 308.215†	-3.6	-0.00259	mg/L	0.006239	-0.00519	mg/L	0.012479	240.62%
As 188.979†	0.6	0.00037	mg/L	0.001375	0.00075	mg/L	0.002750	368.66%
B 249.677†	2.6	0.00040	mg/L	0.000876	0.00080	mg/L	0.001752	217.73%
Ba 233.527†	0.2	0.00005	mg/L	0.000587	0.00010	mg/L	0.001174	>999.9%
Be 313.042†	-39.6	-0.00008	mg/L	0.000040	-0.00015	mg/L	0.000080	52.86%
Ca 317.933†	76.9	0.00631	mg/L	0.001127	0.01262	mg/L	0.002254	17.86%
Cd 228.802†	-7.9	-0.00032	mg/L	0.000068	-0.00063	mg/L	0.000136	21.53%
Co 228.616†	6.2	0.00019	mg/L	0.000071	0.00037	mg/L	0.000142	38.38%
Cr 267.716†	5.5	0.00100	mg/L	0.001270	0.00199	mg/L	0.002539	127.55%
Cu 324.752†	-716.8	-0.00326	mg/L	0.000068	-0.00652	mg/L	0.000136	2.09%
Fe 273.955†	7.9	0.00632	mg/L	0.001822	0.01263	mg/L	0.003644	28.84%
K 766.490†	-45.0	-0.02585	mg/L	0.030900	-0.05171	mg/L	0.061801	119.52%
Mg 279.077†	-0.8	-0.00071	mg/L	0.000309	-0.00142	mg/L	0.000617	43.49%
Mn 257.610†	5.9	0.00018	mg/L	0.000076	0.00036	mg/L	0.000152	42.20%
Mo 202.031†	-0.2	-0.00001	mg/L	0.000154	-0.00003	mg/L	0.000308	>999.9%
Na 589.592†	33.4	0.00328	mg/L	0.001325	0.00655	mg/L	0.002649	40.44%
Na 330.237†	17.6	0.7051	mg/L	0.37633	1.410	mg/L	0.7527	53.37%
Ni 231.604†	3.1	0.00083	mg/L	0.001142	0.00165	mg/L	0.002283	138.26%
Pb 220.353†	6.5	0.00093	mg/L	0.000135	0.00185	mg/L	0.000269	14.53%
Sb 206.836†	-2.3	-0.00082	mg/L	0.000862	-0.00163	mg/L	0.001724	105.70%
Se 196.026†	-2.3	-0.00180	mg/L	0.003837	-0.00361	mg/L	0.007673	212.77%
Si 288.158†	7.6	0.00437	mg/L	0.002077	0.00873	mg/L	0.004153	47.56%
Sn 189.927†	4.2	0.00124	mg/L	0.000805	0.00249	mg/L	0.001609	64.71%
Sr 421.552†	14.7	0.00002	mg/L	0.000015	0.00004	mg/L	0.000030	74.50%
Ti 334.903†	-3.0	-0.00017	mg/L	0.000828	-0.00034	mg/L	0.001656	483.19%
Tl 190.801†	12.2	0.00571	mg/L	0.001565	0.01141	mg/L	0.003129	27.42%
V 292.402†	-5.1	-0.00004	mg/L	0.000045	-0.00009	mg/L	0.000091	104.00%
Zn 206.200†	3.1	0.00090	mg/L	0.000600	0.00180	mg/L	0.001200	66.81%

Sequence No.: 29
Sample ID: VS22 B SWC

Dilution: 5.000000X

Autosampler Location: 347
Date Collected: 11/27/2012 3:53:46 PM
Data Type: Original

Nebulizer Parameters: VS22 B SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VS22 B SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2361553.8	106.8	%	0.42				0.39%
ScR 361.383	302179.6	110.0	%	0.68				0.61%
Ag 328.068†	-103.7	-0.00065	mg/L	0.000258	-0.00324	mg/L	0.001288	39.82%
Al 308.215†	108013.8	77.63	mg/L	0.077	388.1	mg/L	0.39	0.10%
As 188.979†	-163.6	0.01633	mg/L	0.003491	0.08166	mg/L	0.017453	21.37%
B 249.677†	47.4	0.00715	mg/L	0.000959	0.03576	mg/L	0.004795	13.41%
Ba 233.527†	2310.4	0.5702	mg/L	0.00356	2.851	mg/L	0.0178	0.62%
Be 313.042†	794.3	0.00143	mg/L	0.000030	0.00717	mg/L	0.000149	2.08%
Ca 317.933†	306704.7	25.18	mg/L	0.107	125.9	mg/L	0.53	0.42%
Cd 228.802†	248.7	0.00980	mg/L	0.000285	0.04898	mg/L	0.001427	2.91%
Co 228.616†	1544.9	0.03666	mg/L	0.000431	0.1833	mg/L	0.00216	1.18%
Cr 267.716†	517.8	0.09410	mg/L	0.000786	0.4705	mg/L	0.00393	0.84%
Cu 324.752†	12418.6	0.05916	mg/L	0.000430	0.2958	mg/L	0.00215	0.73%
Fe 273.955†	106386.7	85.49	mg/L	0.353	427.4	mg/L	1.77	0.41%
K 766.490†	8366.4	4.805	mg/L	0.0188	24.02	mg/L	0.094	0.39%
Mg 279.077†	26367.0	22.25	mg/L	0.085	111.2	mg/L	0.42	0.38%
Mn 257.610†	64742.1	1.976	mg/L	0.0076	9.881	mg/L	0.0378	0.38%
Mo 202.031†	51.4	0.00265	mg/L	0.000494	0.01323	mg/L	0.002470	18.67%
Na 589.592†	13373.5	1.313	mg/L	0.0037	6.565	mg/L	0.0187	0.29%
Na 330.237†	25.7	1.772	mg/L	0.1257	8.861	mg/L	0.6287	7.10%
Ni 231.604†	235.3	0.06346	mg/L	0.001853	0.3173	mg/L	0.00927	2.92%
Pb 220.353†	1511.4	0.2278	mg/L	0.00127	1.139	mg/L	0.0063	0.56%
Sb 206.836†	4.3	0.00261	mg/L	0.001762	0.01305	mg/L	0.008808	67.51%
Se 196.026†	-0.1	-0.00021	mg/L	0.002517	-0.00103	mg/L	0.012584	>999.9%
Si 288.158†	2341.4	1.346	mg/L	0.0139	6.729	mg/L	0.0696	1.03%
Sn 189.927†	-35.5	-0.00674	mg/L	0.000327	-0.03371	mg/L	0.001634	4.85%
Sr 421.552†	136671.7	0.1873	mg/L	0.00022	0.9365	mg/L	0.00112	0.12%
Ti 334.903†	75418.5	4.293	mg/L	0.0122	21.46	mg/L	0.061	0.28%
Tl 190.801†	-5.9	0.00550	mg/L	0.002181	0.02752	mg/L	0.010907	39.63%
V 292.402†	18134.5	0.1665	mg/L	0.00152	0.8326	mg/L	0.00759	0.91%
Zn 206.200†	2435.4	0.7108	mg/L	0.00351	3.554	mg/L	0.0176	0.49%

Sequence No.: 30
Sample ID: VS22 C SWC

Dilution: 5.000000X

Autosampler Location: 348
Date Collected: 11/27/2012 3:57:45 PM
Data Type: Original

Nebulizer Parameters: VS22 C SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VS22 C SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2391514.9	108.2	%	0.75				0.69%
ScR 361.383	303944.2	110.7	%	0.50				0.45%
Ag 328.068†	-191.3	-0.00124	mg/L	0.000258	-0.00621	mg/L	0.001291	20.79%
Al 308.215†	130233.9	93.60	mg/L	0.126	468.0	mg/L	0.63	0.13%
As 188.979†	-170.5	0.00647	mg/L	0.002404	0.03233	mg/L	0.012020	37.18%
B 249.677†	35.1	0.00526	mg/L	0.000343	0.02629	mg/L	0.001716	6.53%
Ba 233.527†	2206.2	0.5427	mg/L	0.00367	2.714	mg/L	0.0184	0.68%
Be 313.042†	1228.0	0.00227	mg/L	0.000014	0.01135	mg/L	0.000069	0.61%
Ca 317.933†	273281.3	22.44	mg/L	0.018	112.2	mg/L	0.09	0.08%
Cd 228.802†	46.1	0.00173	mg/L	0.000110	0.00864	mg/L	0.000551	6.37%
Co 228.616†	1656.1	0.04026	mg/L	0.000440	0.2013	mg/L	0.00220	1.09%
Cr 267.716†	546.8	0.09976	mg/L	0.001075	0.4988	mg/L	0.00537	1.08%
Cu 324.752†	14099.8	0.06716	mg/L	0.000861	0.3358	mg/L	0.00430	1.28%
Fe 273.955†	115025.7	92.43	mg/L	0.057	462.2	mg/L	0.29	0.06%
K 766.490†	9149.9	5.255	mg/L	0.0030	26.27	mg/L	0.015	0.06%
Mg 279.077†	25829.1	21.79	mg/L	0.014	108.9	mg/L	0.07	0.07%
Mn 257.610†	30445.5	0.9293	mg/L	0.00178	4.646	mg/L	0.0089	0.19%
Mo 202.031†	37.3	0.00187	mg/L	0.000216	0.00936	mg/L	0.001082	11.56%
Na 589.592†	16503.4	1.620	mg/L	0.0035	8.101	mg/L	0.0173	0.21%
Na 330.237†	33.8	2.208	mg/L	0.1997	11.04	mg/L	0.999	9.04%
Ni 231.604†	257.0	0.06932	mg/L	0.001828	0.3466	mg/L	0.00914	2.64%
Pb 220.353†	191.8	0.04568	mg/L	0.001323	0.2284	mg/L	0.00662	2.90%
Sb 206.836†	-3.3	-0.00026	mg/L	0.001805	-0.00129	mg/L	0.009026	698.46%
Se 196.026†	3.3	0.00244	mg/L	0.003985	0.01218	mg/L	0.019926	163.65%
Si 288.158†	3306.1	1.899	mg/L	0.0145	9.495	mg/L	0.0723	0.76%
Sn 189.927†	-29.6	-0.00538	mg/L	0.002055	-0.02688	mg/L	0.010276	38.23%
Sr 421.552†	132006.1	0.1809	mg/L	0.00015	0.9046	mg/L	0.00075	0.08%
Ti 334.903†	72014.3	4.099	mg/L	0.0011	20.49	mg/L	0.005	0.03%
Tl 190.801†	-10.6	0.00411	mg/L	0.001745	0.02053	mg/L	0.008725	42.51%
V 292.402†	16015.1	0.1462	mg/L	0.00177	0.7311	mg/L	0.00883	1.21%
Zn 206.200†	799.6	0.2334	mg/L	0.00177	1.167	mg/L	0.0088	0.76%

Sequence No.: 31
Sample ID: VS22 D SWC

Dilution: 5.000000X

Autosampler Location: 349
Date Collected: 11/27/2012 4:01:44 PM
Data Type: Original

Nebulizer Parameters: VS22 D SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VS22 D SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2352452.4	106.4	%	0.26				0.24%
ScR 361.383	292159.3	106.4	%	0.25				0.24%
Ag 328.068†	-375.0	-0.00246	mg/L	0.000187	-0.01230	mg/L	0.000937	7.62%
Al 308.215†	103126.2	74.11	mg/L	0.645	370.6	mg/L	3.22	0.87%
As 188.979†	-138.8	0.03185	mg/L	0.003936	0.1593	mg/L	0.01968	12.36%
B 249.677†	-1.8	-0.00038	mg/L	0.001597	-0.00190	mg/L	0.007987	420.92%
Ba 233.527†	3320.6	0.8217	mg/L	0.00930	4.108	mg/L	0.0465	1.13%
Be 313.042†	1031.9	0.00188	mg/L	0.000044	0.00938	mg/L	0.000222	2.36%
Ca 317.933†	2744447.7	225.3	mg/L	1.06	1127	mg/L	5.32	0.47%
Cd 228.802†	56.0	0.00185	mg/L	0.000192	0.00926	mg/L	0.000959	10.36%
Co 228.616†	1812.9	0.04355	mg/L	0.000240	0.2178	mg/L	0.00120	0.55%
Cr 267.716†	781.9	0.1392	mg/L	0.00094	0.6958	mg/L	0.00471	0.68%
Cu 324.752†	25981.9	0.1216	mg/L	0.00025	0.6082	mg/L	0.00124	0.20%
Fe 273.955†	136493.2	109.7	mg/L	1.17	548.4	mg/L	5.83	1.06%
K 766.490†	13790.9	7.920	mg/L	0.1247	39.60	mg/L	0.624	1.57%
Mg 279.077†	48590.0	41.02	mg/L	0.464	205.1	mg/L	2.32	1.13%
Mn 257.610†	51106.8	1.560	mg/L	0.0157	7.798	mg/L	0.0783	1.00%
Mo 202.031†	107.2	0.00365	mg/L	0.000415	0.01826	mg/L	0.002076	11.37%
Na 589.592†	17217.3	1.690	mg/L	0.0101	8.452	mg/L	0.0506	0.60%
Na 330.237†	33.1	2.312	mg/L	0.4490	11.56	mg/L	2.245	19.42%
Ni 231.604†	379.5	0.1024	mg/L	0.00114	0.5118	mg/L	0.00570	1.11%
Pb 220.353†	172.7	0.03762	mg/L	0.000478	0.1881	mg/L	0.00239	1.27%
Sb 206.836†	-0.3	0.00050	mg/L	0.001550	0.00248	mg/L	0.007750	312.49%
Se 196.026†	-20.9	-0.01635	mg/L	0.005354	-0.08175	mg/L	0.026772	32.75%
Si 288.158†	2980.3	1.714	mg/L	0.0241	8.572	mg/L	0.1205	1.41%
Sn 189.927†	-80.7	0.00476	mg/L	0.000673	0.02379	mg/L	0.003367	14.15%
Sr 421.552†	508300.3	0.6966	mg/L	0.00117	3.483	mg/L	0.0059	0.17%
Ti 334.903†	82371.2	4.679	mg/L	0.0447	23.39	mg/L	0.224	0.96%
Tl 190.801†	2.3	0.01178	mg/L	0.004084	0.05888	mg/L	0.020418	34.68%
V 292.402†	21639.9	0.1987	mg/L	0.00096	0.9934	mg/L	0.00481	0.48%
Zn 206.200†	826.7	0.2412	mg/L	0.00195	1.206	mg/L	0.0098	0.81%

Sequence No.: 32
Sample ID: VS22 A-L SWC

Autosampler Location: 350
Date Collected: 11/27/2012 4:05:45 PM
Data Type: Original

Dilution: 25.000000X

Nebulizer Parameters: VS22 A-L SWC

Analyte	Back Pressure	Flow
All	216.0 kPa	0.75 L/min

Mean Data: VS22 A-L SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2376157.7	107.5	%	0.63				0.58%
ScR 361.383	303148.5	110.4	%	0.30				0.27%
Ag 328.068†	3.4	0.00003	mg/L	0.000119	0.00071	mg/L	0.002978	418.47%
Al 308.215†	12441.8	8.942	mg/L	0.0075	223.5	mg/L	0.19	0.08%
As 188.979†	-9.3	0.00731	mg/L	0.001036	0.1827	mg/L	0.02590	14.18%
B 249.677†	11.8	0.00180	mg/L	0.000461	0.04493	mg/L	0.011532	25.66%
Ba 233.527†	497.9	0.1241	mg/L	0.00059	3.103	mg/L	0.0147	0.47%
Be 313.042†	89.9	0.00016	mg/L	0.000012	0.00406	mg/L	0.000294	7.25%
Ca 317.933†	70516.6	5.790	mg/L	0.0042	144.7	mg/L	0.10	0.07%
Cd 228.802†	102.7	0.00402	mg/L	0.000152	0.1005	mg/L	0.00380	3.78%
Co 228.616†	213.5	0.00530	mg/L	0.000139	0.1326	mg/L	0.00347	2.62%
Cr 267.716†	74.3	0.01342	mg/L	0.000462	0.3356	mg/L	0.01155	3.44%
Cu 324.752†	2059.8	0.00972	mg/L	0.000141	0.2430	mg/L	0.00353	1.45%
Fe 273.955†	13478.6	10.83	mg/L	0.039	270.8	mg/L	0.97	0.36%
K 766.490†	1428.6	0.8204	mg/L	0.02027	20.51	mg/L	0.507	2.47%
Mg 279.077†	3352.1	2.828	mg/L	0.0222	70.71	mg/L	0.556	0.79%
Mn 257.610†	21678.8	0.6617	mg/L	0.00149	16.54	mg/L	0.037	0.22%
Mo 202.031†	12.7	0.00066	mg/L	0.000257	0.01645	mg/L	0.006431	39.09%
Na 589.592†	1328.3	0.1304	mg/L	0.00078	3.260	mg/L	0.0196	0.60%
Na 330.237†	16.8	0.7190	mg/L	0.18392	17.97	mg/L	4.598	25.58%
Ni 231.604†	34.9	0.00942	mg/L	0.000762	0.2354	mg/L	0.01904	8.09%
Pb 220.353†	1228.0	0.1745	mg/L	0.00072	4.362	mg/L	0.0180	0.41%
Sb 206.836†	-3.0	-0.00098	mg/L	0.001486	-0.02447	mg/L	0.037144	151.77%
Se 196.026†	-4.4	-0.00340	mg/L	0.003363	-0.08494	mg/L	0.084068	98.97%
Si 288.158†	275.7	0.1585	mg/L	0.00732	3.963	mg/L	0.1829	4.62%
Sn 189.927†	-7.5	-0.00143	mg/L	0.000536	-0.03581	mg/L	0.013404	37.43%
Sr 421.552†	28745.2	0.03940	mg/L	0.000109	0.9849	mg/L	0.00272	0.28%
Ti 334.903†	8365.6	0.4760	mg/L	0.00178	11.90	mg/L	0.044	0.37%
Tl 190.801†	6.1	0.00392	mg/L	0.001040	0.09794	mg/L	0.026002	26.55%
V 292.402†	2083.4	0.01918	mg/L	0.000362	0.4796	mg/L	0.00906	1.89%
Zn 206.200†	656.1	0.1915	mg/L	0.00182	4.787	mg/L	0.0455	0.95%

Sequence No.: 33
Sample ID: VS22 A SWC

Dilution: 5.000000X

Autosampler Location: 351
Date Collected: 11/27/2012 4:09:44 PM
Data Type: Original

Nebulizer Parameters: VS22 A SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VS22 A SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2406168.3	108.8	%	0.77				0.71%
ScR 361.383	306079.9	111.4	%	0.83				0.74%
Ag 328.068†	98.5	0.00069	mg/L	0.000217	0.00345	mg/L	0.001084	31.41%
Al 308.215†	63831.7	45.87	mg/L	0.129	229.4	mg/L	0.64	0.28%
As 188.979†	-53.3	0.03351	mg/L	0.002446	0.1676	mg/L	0.01223	7.30%
B 249.677†	68.4	0.01038	mg/L	0.000495	0.05192	mg/L	0.002473	4.76%
Ba 233.527†	2559.5	0.6381	mg/L	0.00884	3.191	mg/L	0.0442	1.38%
Be 313.042†	555.8	0.00101	mg/L	0.000046	0.00507	mg/L	0.000228	4.50%
Ca 317.933†	365096.6	29.98	mg/L	0.129	149.9	mg/L	0.64	0.43%
Cd 228.802†	544.0	0.02131	mg/L	0.000272	0.1066	mg/L	0.00136	1.28%
Co 228.616†	1066.7	0.02637	mg/L	0.000309	0.1319	mg/L	0.00155	1.17%
Cr 267.716†	335.3	0.06067	mg/L	0.001701	0.3033	mg/L	0.00851	2.80%
Cu 324.752†	13433.4	0.06290	mg/L	0.000197	0.3145	mg/L	0.00099	0.31%
Fe 273.955†	68961.9	55.42	mg/L	0.186	277.1	mg/L	0.93	0.34%
K 766.490†	7685.6	4.414	mg/L	0.0323	22.07	mg/L	0.162	0.73%
Mg 279.077†	16265.3	13.72	mg/L	0.055	68.61	mg/L	0.275	0.40%
Mn 257.610†	111508.7	3.404	mg/L	0.0108	17.02	mg/L	0.054	0.32%
Mo 202.031†	60.8	0.00313	mg/L	0.000502	0.01565	mg/L	0.002511	16.04%
Na 589.592†	6592.6	0.6472	mg/L	0.00388	3.236	mg/L	0.0194	0.60%
Na 330.237†	21.3	1.078	mg/L	0.1896	5.389	mg/L	0.9479	17.59%
Ni 231.604†	169.9	0.04583	mg/L	0.000590	0.2292	mg/L	0.00295	1.29%
Pb 220.353†	6210.3	0.8825	mg/L	0.00799	4.413	mg/L	0.0399	0.90%
Sb 206.836†	24.7	0.00916	mg/L	0.002142	0.04579	mg/L	0.010709	23.39%
Se 196.026†	0.4	0.00024	mg/L	0.005986	0.00122	mg/L	0.029929	>999.9%
Si 288.158†	1426.6	0.8200	mg/L	0.01208	4.100	mg/L	0.0604	1.47%
Sn 189.927†	-20.6	-0.00200	mg/L	0.001251	-0.00999	mg/L	0.006255	62.60%
Sr 421.552†	146029.8	0.2001	mg/L	0.00084	1.001	mg/L	0.0042	0.42%
Ti 334.903†	42691.7	2.429	mg/L	0.0096	12.15	mg/L	0.048	0.39%
Tl 190.801†	9.4	0.00979	mg/L	0.001174	0.04896	mg/L	0.005868	11.99%
V 292.402†	10524.1	0.09683	mg/L	0.000045	0.4842	mg/L	0.00023	0.05%
Zn 206.200†	3415.9	0.9970	mg/L	0.01567	4.985	mg/L	0.0784	1.57%

Sequence No.: 34
Sample ID: VS22 ADUP SWC

Autosampler Location: 352
Date Collected: 11/27/2012 4:13:43 PM
Data Type: Original

Dilution: 5.000000X

Nebulizer Parameters: VS22 ADUP SWC

Analyte	Back Pressure	Flow
All	216.0 kPa	0.75 L/min

Mean Data: VS22 ADUP SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2397117.4	108.4	%	0.61				0.57%
ScR 361.383	306990.9	111.8	%	0.07				0.07%
Ag 328.068†	92.0	0.00065	mg/L	0.000108	0.00324	mg/L	0.000538	16.59%
Al 308.215†	66130.1	47.53	mg/L	0.141	237.6	mg/L	0.71	0.30%
As 188.979†	-63.3	0.03275	mg/L	0.002432	0.1638	mg/L	0.01216	7.43%
B 249.677†	77.2	0.01174	mg/L	0.001074	0.05870	mg/L	0.005368	9.14%
Ba 233.527†	2618.1	0.6527	mg/L	0.00095	3.263	mg/L	0.0048	0.15%
Be 313.042†	564.5	0.00103	mg/L	0.000007	0.00513	mg/L	0.000037	0.72%
Ca 317.933†	383320.7	31.47	mg/L	0.105	157.4	mg/L	0.53	0.33%
Cd 228.802†	572.2	0.02246	mg/L	0.000193	0.1123	mg/L	0.00096	0.86%
Co 228.616†	1070.6	0.02608	mg/L	0.000197	0.1304	mg/L	0.00098	0.75%
Cr 267.716†	347.3	0.06284	mg/L	0.000632	0.3142	mg/L	0.00316	1.01%
Cu 324.752†	13849.5	0.06482	mg/L	0.000270	0.3241	mg/L	0.00135	0.42%
Fe 273.955†	70926.2	56.99	mg/L	0.248	285.0	mg/L	1.24	0.44%
K 766.490†	8076.4	4.638	mg/L	0.0083	23.19	mg/L	0.041	0.18%
Mg 279.077†	16682.8	14.07	mg/L	0.031	70.37	mg/L	0.153	0.22%
Mn 257.610†	115286.5	3.519	mg/L	0.0113	17.59	mg/L	0.057	0.32%
Mo 202.031†	63.1	0.00324	mg/L	0.000080	0.01621	mg/L	0.000402	2.48%
Na 589.592†	7321.5	0.7188	mg/L	0.00249	3.594	mg/L	0.0125	0.35%
Na 330.237†	25.8	1.301	mg/L	0.2481	6.504	mg/L	1.2407	19.08%
Ni 231.604†	168.0	0.04531	mg/L	0.000468	0.2266	mg/L	0.00234	1.03%
Pb 220.353†	6252.1	0.8887	mg/L	0.00230	4.444	mg/L	0.0115	0.26%
Sb 206.836†	27.7	0.01026	mg/L	0.000331	0.05131	mg/L	0.001656	3.23%
Se 196.026†	1.2	0.00087	mg/L	0.002873	0.00433	mg/L	0.014365	331.79%
Si 288.158†	1529.6	0.8792	mg/L	0.00591	4.396	mg/L	0.0296	0.67%
Sn 189.927†	-22.2	-0.00225	mg/L	0.000169	-0.01124	mg/L	0.000844	7.51%
Sr 421.552†	153375.3	0.2102	mg/L	0.00058	1.051	mg/L	0.0029	0.28%
Ti 334.903†	46195.8	2.629	mg/L	0.0093	13.14	mg/L	0.047	0.35%
Tl 190.801†	4.3	0.00754	mg/L	0.001299	0.03772	mg/L	0.006497	17.22%
V 292.402†	11223.0	0.1033	mg/L	0.00037	0.5165	mg/L	0.00185	0.36%
Zn 206.200†	3454.4	1.008	mg/L	0.0054	5.041	mg/L	0.0272	0.54%

Sequence No.: 35
Sample ID: VS22 ASPK SWC

Dilution: 5.000000X

Autosampler Location: 353
Date Collected: 11/27/2012 4:17:42 PM
Data Type: Original

Nebulizer Parameters: VS22 ASPK SWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VS22 ASPK SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2406368.0	108.8	%	0.77				0.71%
ScR 361.383	302965.1	110.3	%	0.93				0.84%
Ag 328.068†	29922.6	0.2011	mg/L	0.00109	1.005	mg/L	0.0054	0.54%
Al 308.215†	70115.0	50.39	mg/L	0.396	251.9	mg/L	1.98	0.79%
As 188.979†	1173.0	0.8284	mg/L	0.00459	4.142	mg/L	0.0230	0.55%
B 249.677†	83.3	0.01225	mg/L	0.001468	0.06127	mg/L	0.007339	11.98%
Ba 233.527†	5813.7	1.460	mg/L	0.0118	7.302	mg/L	0.0589	0.81%
Be 313.042†	104257.2	0.1993	mg/L	0.00208	0.9966	mg/L	0.01040	1.04%
Ca 317.933†	440108.4	36.14	mg/L	0.322	180.7	mg/L	1.61	0.89%
Cd 228.802†	5928.9	0.2298	mg/L	0.00147	1.149	mg/L	0.0074	0.64%
Co 228.616†	7850.1	0.2282	mg/L	0.00150	1.141	mg/L	0.0075	0.66%
Cr 267.716†	1478.4	0.2658	mg/L	0.00130	1.329	mg/L	0.0065	0.49%
Cu 324.752†	58827.4	0.2693	mg/L	0.00167	1.347	mg/L	0.0083	0.62%
Fe 273.955†	73139.0	58.77	mg/L	0.506	293.9	mg/L	2.53	0.86%
K 766.490†	14958.2	8.591	mg/L	0.0728	42.95	mg/L	0.364	0.85%
Mg 279.077†	22902.5	19.33	mg/L	0.141	96.66	mg/L	0.703	0.73%
Mn 257.610†	123996.9	3.785	mg/L	0.0310	18.92	mg/L	0.155	0.82%
Mo 202.031†	67.1	0.00341	mg/L	0.000322	0.01707	mg/L	0.001610	9.44%
Na 589.592†	46712.4	4.586	mg/L	0.0395	22.93	mg/L	0.197	0.86%
Na 330.237†	125.0	5.220	mg/L	0.0455	26.10	mg/L	0.228	0.87%
Ni 231.604†	891.9	0.2402	mg/L	0.00044	1.201	mg/L	0.0022	0.18%
Pb 220.353†	11946.2	1.691	mg/L	0.0099	8.453	mg/L	0.0496	0.59%
Sb 206.836†	22.2	0.00621	mg/L	0.000516	0.03107	mg/L	0.002581	8.31%
Se 196.026†	1007.7	0.7822	mg/L	0.01149	3.911	mg/L	0.0575	1.47%
Si 288.158†	1389.1	0.7999	mg/L	0.00561	4.000	mg/L	0.0281	0.70%
Sn 189.927†	-31.3	-0.00433	mg/L	0.001216	-0.02163	mg/L	0.006082	28.12%
Sr 421.552†	302175.2	0.4141	mg/L	0.00350	2.071	mg/L	0.0175	0.85%
Ti 334.903†	47621.5	2.709	mg/L	0.0251	13.55	mg/L	0.125	0.92%
Tl 190.801†	1648.2	0.7750	mg/L	0.00323	3.875	mg/L	0.0161	0.42%
V 292.402†	31658.0	0.2970	mg/L	0.00231	1.485	mg/L	0.0116	0.78%
Zn 206.200†	4146.1	1.210	mg/L	0.0074	6.050	mg/L	0.0369	0.61%

Sequence No.: 36
Sample ID: VS22 APOST SWC

Dilution: 5.000000X

Autosampler Location: 354
Date Collected: 11/27/2012 4:21:42 PM
Data Type: Original

Nebulizer Parameters: VS22 APOST SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VS22 APOST SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2376929.0	107.5	%	0.20				0.19%
ScR 361.383	303033.1	110.3	%	1.03				0.94%
Ag 328.068†	70599.2	0.4744	mg/L	0.00022	2.372	mg/L	0.0011	0.05%
Al 308.215†	68422.4	49.17	mg/L	0.542	245.8	mg/L	2.71	1.10%
As 188.979†	3109.7	2.065	mg/L	0.0081	10.33	mg/L	0.041	0.39%
B 249.677†	75.2	0.01038	mg/L	0.000618	0.05192	mg/L	0.003088	5.95%
Ba 233.527†	10439.5	2.630	mg/L	0.0242	13.15	mg/L	0.121	0.92%
Be 313.042†	259628.9	0.4965	mg/L	0.00503	2.482	mg/L	0.0252	1.01%
Ca 317.933†	493208.6	40.49	mg/L	0.446	202.5	mg/L	2.23	1.10%
Cd 228.802†	14033.0	0.5433	mg/L	0.00115	2.716	mg/L	0.0058	0.21%
Co 228.616†	18019.9	0.5322	mg/L	0.00077	2.661	mg/L	0.0039	0.15%
Cr 267.716†	3122.0	0.5608	mg/L	0.00311	2.804	mg/L	0.0155	0.55%
Cu 324.752†	122444.4	0.5585	mg/L	0.00077	2.793	mg/L	0.0038	0.14%
Fe 273.955†	72410.5	58.18	mg/L	0.585	290.9	mg/L	2.92	1.00%
K 766.490†	25003.5	14.36	mg/L	0.132	71.80	mg/L	0.662	0.92%
Mg 279.077†	29504.9	24.92	mg/L	0.190	124.6	mg/L	0.95	0.76%
Mn 257.610†	129238.6	3.945	mg/L	0.0364	19.73	mg/L	0.182	0.92%
Mo 202.031†	73.1	0.00369	mg/L	0.000146	0.01843	mg/L	0.000730	3.96%
Na 589.592†	103833.9	10.19	mg/L	0.118	50.97	mg/L	0.592	1.16%
Na 330.237†	277.5	11.18	mg/L	0.347	55.92	mg/L	1.734	3.10%
Ni 231.604†	1952.8	0.5258	mg/L	0.00441	2.629	mg/L	0.0221	0.84%
Pb 220.353†	20419.9	2.883	mg/L	0.0048	14.41	mg/L	0.024	0.17%
Sb 206.836†	39.5	0.00897	mg/L	0.003442	0.04485	mg/L	0.017212	38.38%
Se 196.026†	2574.3	1.998	mg/L	0.0128	9.992	mg/L	0.0640	0.64%
Si 288.158†	1446.9	0.8350	mg/L	0.00581	4.175	mg/L	0.0291	0.70%
Sn 189.927†	-29.4	-0.00320	mg/L	0.001134	-0.01599	mg/L	0.005670	35.45%
Sr 421.552†	502730.9	0.6890	mg/L	0.00701	3.445	mg/L	0.0350	1.02%
Ti 334.903†	43875.5	2.496	mg/L	0.0262	12.48	mg/L	0.131	1.05%
Tl 190.801†	4136.3	1.936	mg/L	0.0011	9.682	mg/L	0.0054	0.06%
V 292.402†	60345.7	0.5693	mg/L	0.00089	2.847	mg/L	0.0045	0.16%
Zn 206.200†	5089.0	1.485	mg/L	0.0107	7.427	mg/L	0.0536	0.72%

Sequence No.: 37
Sample ID: VS22 MB1SPK SWC

Dilution: 2.000000X

Autosampler Location: 355
Date Collected: 11/27/2012 4:25:27 PM
Data Type: Original

Nebulizer Parameters: VS22 MB1SPK SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VS22 MB1SPK SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2369704.6	107.2	%	0.66				0.62%
ScR 361.383	302476.4	110.1	%	1.30				1.18%
Ag 328.068†	79404.4	0.5335	mg/L	0.00142	1.067	mg/L	0.0028	0.27%
Al 308.215†	2772.8	1.986	mg/L	0.0241	3.971	mg/L	0.0482	1.21%
As 188.979†	3210.2	2.060	mg/L	0.0177	4.120	mg/L	0.0354	0.86%
B 249.677†	4.8	-0.00033	mg/L	0.000780	-0.00066	mg/L	0.001560	238.12%
Ba 233.527†	7899.8	1.997	mg/L	0.0156	3.994	mg/L	0.0313	0.78%
Be 313.042†	263775.9	0.5044	mg/L	0.00492	1.009	mg/L	0.0098	0.98%
Ca 317.933†	120969.3	9.932	mg/L	0.0940	19.86	mg/L	0.188	0.95%
Cd 228.802†	13550.0	0.5242	mg/L	0.00192	1.048	mg/L	0.0038	0.37%
Co 228.616†	17189.6	0.5130	mg/L	0.00233	1.026	mg/L	0.0047	0.45%
Cr 267.716†	2836.6	0.5092	mg/L	0.00502	1.018	mg/L	0.0100	0.99%
Cu 324.752†	107271.8	0.4877	mg/L	0.00028	0.9754	mg/L	0.00056	0.06%
Fe 273.955†	2522.0	2.023	mg/L	0.0216	4.046	mg/L	0.0431	1.07%
K 766.490†	17150.8	9.850	mg/L	0.0962	19.70	mg/L	0.192	0.98%
Mg 279.077†	11994.2	10.14	mg/L	0.107	20.28	mg/L	0.215	1.06%
Mn 257.610†	16566.6	0.5060	mg/L	0.00532	1.012	mg/L	0.0106	1.05%
Mo 202.031†	15.2	0.00073	mg/L	0.000198	0.00145	mg/L	0.000396	27.24%
Na 589.592†	97449.6	9.567	mg/L	0.0885	19.13	mg/L	0.177	0.92%
Na 330.237†	269.5	10.62	mg/L	0.204	21.24	mg/L	0.408	1.92%
Ni 231.604†	1814.7	0.4885	mg/L	0.00343	0.9770	mg/L	0.00685	0.70%
Pb 220.353†	14286.8	2.011	mg/L	0.0117	4.022	mg/L	0.0235	0.58%
Sb 206.836†	8.0	-0.00260	mg/L	0.000388	-0.00520	mg/L	0.000777	14.94%
Se 196.026†	2575.0	1.999	mg/L	0.0185	3.998	mg/L	0.0369	0.92%
Si 288.158†	-5.0	0.00032	mg/L	0.002753	0.00064	mg/L	0.005505	856.57%
Sn 189.927†	-14.3	-0.00293	mg/L	0.001181	-0.00586	mg/L	0.002361	40.28%
Sr 421.552†	355913.8	0.4878	mg/L	0.00434	0.9756	mg/L	0.00867	0.89%
Ti 334.903†	21.4	0.00064	mg/L	0.000179	0.00129	mg/L	0.000358	27.81%
Tl 190.801†	4291.5	2.003	mg/L	0.0184	4.007	mg/L	0.0367	0.92%
V 292.402†	52628.2	0.4991	mg/L	0.00202	0.9981	mg/L	0.00403	0.40%
Zn 206.200†	1704.9	0.4976	mg/L	0.00436	0.9953	mg/L	0.00872	0.88%

Sequence No.: 38
Sample ID: CV 12
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 11/27/2012 4:29:27 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	216.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2333714.6	105.6	%	0.79				0.75%
ScR 361.383	294363.3	107.2	%	1.22				1.14%
Ag 328.068†	153377.4	1.031	mg/L	0.0099	1.031	mg/L	0.0099	0.96%
Al 308.215†	2795.9	1.976	mg/L	0.0179	1.976	mg/L	0.0179	0.91%
As 188.979†	3123.4	2.030	mg/L	0.0273	2.030	mg/L	0.0273	1.34%
B 249.677†	6293.9	0.9609	mg/L	0.00954	0.9609	mg/L	0.00954	0.99%
Ba 233.527†	3909.3	0.9881	mg/L	0.00880	0.9881	mg/L	0.00880	0.89%
Be 313.042†	506145.5	0.9679	mg/L	0.01044	0.9679	mg/L	0.01044	1.08%
Ca 317.933†	23110.7	1.897	mg/L	0.0242	1.897	mg/L	0.0242	1.28%
Cd 228.802†	25881.3	1.014	mg/L	0.0081	1.014	mg/L	0.0081	0.80%
Co 228.616†	33403.9	0.9953	mg/L	0.00739	0.9953	mg/L	0.00739	0.74%
Cr 267.716†	5567.6	1.001	mg/L	0.0088	1.001	mg/L	0.0088	0.88%
Cu 324.752†	220357.1	1.001	mg/L	0.0096	1.001	mg/L	0.0096	0.95%
Fe 273.955†	2502.9	2.004	mg/L	0.0136	2.004	mg/L	0.0136	0.68%
K 766.490†	34103.0	19.59	mg/L	0.288	19.59	mg/L	0.288	1.47%
Mg 279.077†	2329.1	1.976	mg/L	0.0170	1.976	mg/L	0.0170	0.86%
Mn 257.610†	31697.6	0.9678	mg/L	0.01307	0.9678	mg/L	0.01307	1.35%
Mo 202.031†	17412.3	0.9901	mg/L	0.00798	0.9901	mg/L	0.00798	0.81%
Na 589.592†	493510.2	48.45	mg/L	0.567	48.45	mg/L	0.567	1.17%
Na 330.237†	1300.4	51.94	mg/L	0.628	51.94	mg/L	0.628	1.21%
Ni 231.604†	3574.2	0.9642	mg/L	0.00835	0.9642	mg/L	0.00835	0.87%
Pb 220.353†	14003.9	1.971	mg/L	0.0098	1.971	mg/L	0.0098	0.50%
Sb 206.836†	6005.4	2.097	mg/L	0.0253	2.097	mg/L	0.0253	1.21%
Se 196.026†	2515.4	1.952	mg/L	0.0219	1.952	mg/L	0.0219	1.12%
Si 288.158†	3645.2	2.090	mg/L	0.0262	2.090	mg/L	0.0262	1.26%
Sn 189.927†	3424.5	1.011	mg/L	0.0125	1.011	mg/L	0.0125	1.23%
Sr 421.552†	695837.8	0.9536	mg/L	0.01122	0.9536	mg/L	0.01122	1.18%
Ti 334.903†	17835.3	1.014	mg/L	0.0127	1.014	mg/L	0.0127	1.25%
Tl 190.801†	4249.6	1.980	mg/L	0.0203	1.980	mg/L	0.0203	1.03%
V 292.402†	103437.9	0.9810	mg/L	0.00939	0.9810	mg/L	0.00939	0.96%
Zn 206.200†	3448.3	1.006	mg/L	0.0104	1.006	mg/L	0.0104	1.03%

Sequence No.: 39
Sample ID: CB 9
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 11/27/2012 4:34:30 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2363761.7	106.9	%	1.01				0.95%
ScR 361.383	298431.8	108.7	%	0.70				0.65%
Ag 328.068†	4.8	0.00003	mg/L	0.000270	0.00003	mg/L	0.000270	832.25%
Al 308.215†	-1.0	-0.00076	mg/L	0.006025	-0.00076	mg/L	0.006025	793.76%
As 188.979†	2.5	0.00161	mg/L	0.001429	0.00161	mg/L	0.001429	88.82%
B 249.677†	6.2	0.00095	mg/L	0.001146	0.00095	mg/L	0.001146	120.98%
Ba 233.527†	0.1	0.00003	mg/L	0.000552	0.00003	mg/L	0.000552	>999.9%
Be 313.042†	-3.8	-0.00001	mg/L	0.000015	-0.00001	mg/L	0.000015	206.18%
Ca 317.933†	-6.1	-0.00050	mg/L	0.000086	-0.00050	mg/L	0.000086	17.31%
Cd 228.802†	-3.4	-0.00015	mg/L	0.000059	-0.00015	mg/L	0.000059	40.57%
Co 228.616†	11.4	0.00034	mg/L	0.000119	0.00034	mg/L	0.000119	34.70%
Cr 267.716†	7.4	0.00133	mg/L	0.000255	0.00133	mg/L	0.000255	19.25%
Cu 324.752†	-751.4	-0.00342	mg/L	0.000043	-0.00342	mg/L	0.000043	1.26%
Fe 273.955†	0.5	0.00039	mg/L	0.001627	0.00039	mg/L	0.001627	422.09%
K 766.490†	-52.3	-0.03003	mg/L	0.020925	-0.03003	mg/L	0.020925	69.68%
Mg 279.077†	-0.7	-0.00059	mg/L	0.005879	-0.00059	mg/L	0.005879	991.50%
Mn 257.610†	1.0	0.00003	mg/L	0.000057	0.00003	mg/L	0.000057	179.92%
Mo 202.031†	6.2	0.00035	mg/L	0.000440	0.00035	mg/L	0.000440	125.45%
Na 589.592†	54.7	0.00537	mg/L	0.000521	0.00537	mg/L	0.000521	9.69%
Na 330.237†	10.5	0.4183	mg/L	0.13983	0.4183	mg/L	0.13983	33.43%
Ni 231.604†	6.6	0.00177	mg/L	0.000865	0.00177	mg/L	0.000865	48.94%
Pb 220.353†	10.5	0.00149	mg/L	0.000845	0.00149	mg/L	0.000845	56.77%
Sb 206.836†	3.0	0.00103	mg/L	0.001750	0.00103	mg/L	0.001750	170.56%
Se 196.026†	-4.8	-0.00371	mg/L	0.002360	-0.00371	mg/L	0.002360	63.56%
Si 288.158†	-2.5	-0.00147	mg/L	0.001373	-0.00147	mg/L	0.001373	93.62%
Sn 189.927†	2.4	0.00070	mg/L	0.000556	0.00070	mg/L	0.000556	79.23%
Sr 421.552†	35.9	0.00005	mg/L	0.000020	0.00005	mg/L	0.000020	40.98%
Ti 334.903†	-6.5	-0.00037	mg/L	0.000274	-0.00037	mg/L	0.000274	73.77%
Tl 190.801†	5.6	0.00260	mg/L	0.002060	0.00260	mg/L	0.002060	79.25%
V 292.402†	2.0	0.00003	mg/L	0.000142	0.00003	mg/L	0.000142	566.26%
Zn 206.200†	0.5	0.00014	mg/L	0.000981	0.00014	mg/L	0.000981	683.38%

Sequence No.: 40
Sample ID: CRI

Dilution: 1.000000X

Autosampler Location: 356
Date Collected: 11/27/2012 4:38:45 PM
Data Type: Original

Nebulizer Parameters: CRI

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CRI

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2375100.0	107.4	%	0.25				0.23%
ScR 361.383	296834.1	108.1	%	0.42				0.39%
Ag 328.068†	442.6	0.00297	mg/L	0.000136	0.00297	mg/L	0.000136	4.56%
Al 308.215†	62.1	0.04447	mg/L	0.002662	0.04447	mg/L	0.002662	5.99%
As 188.979†	75.8	0.04877	mg/L	0.001780	0.04877	mg/L	0.001780	3.65%
B 249.677†	125.4	0.01917	mg/L	0.000559	0.01917	mg/L	0.000559	2.92%
Ba 233.527†	11.5	0.00290	mg/L	0.000721	0.00290	mg/L	0.000721	24.83%
Be 313.042†	476.2	0.00091	mg/L	0.000047	0.00091	mg/L	0.000047	5.13%
Ca 317.933†	581.0	0.04770	mg/L	0.001867	0.04770	mg/L	0.001867	3.91%
Cd 228.802†	54.6	0.00185	mg/L	0.000039	0.00185	mg/L	0.000039	2.13%
Co 228.616†	118.9	0.00354	mg/L	0.000051	0.00354	mg/L	0.000051	1.45%
Cr 267.716†	33.1	0.00594	mg/L	0.000764	0.00594	mg/L	0.000764	12.85%
Cu 324.752†	-334.0	-0.00152	mg/L	0.000061	-0.00152	mg/L	0.000061	4.00%
Fe 273.955†	60.8	0.04883	mg/L	0.003484	0.04883	mg/L	0.003484	7.13%
K 766.490†	805.3	0.4625	mg/L	0.03152	0.4625	mg/L	0.03152	6.81%
Mg 279.077†	56.1	0.04747	mg/L	0.003609	0.04747	mg/L	0.003609	7.60%
Mn 257.610†	31.7	0.00097	mg/L	0.000060	0.00097	mg/L	0.000060	6.20%
Mo 202.031†	85.4	0.00486	mg/L	0.000137	0.00486	mg/L	0.000137	2.82%
Na 589.592†	4735.1	0.4649	mg/L	0.00714	0.4649	mg/L	0.00714	1.54%
Na 330.237†	22.7	0.9075	mg/L	0.20289	0.9075	mg/L	0.20289	22.36%
Ni 231.604†	40.4	0.01090	mg/L	0.001154	0.01090	mg/L	0.001154	10.59%
Pb 220.353†	147.3	0.02074	mg/L	0.000682	0.02074	mg/L	0.000682	3.29%
Sb 206.836†	145.2	0.05074	mg/L	0.002269	0.05074	mg/L	0.002269	4.47%
Se 196.026†	58.8	0.04568	mg/L	0.001935	0.04568	mg/L	0.001935	4.24%
Si 288.158†	114.2	0.06545	mg/L	0.001262	0.06545	mg/L	0.001262	1.93%
Sn 189.927†	35.3	0.01044	mg/L	0.000821	0.01044	mg/L	0.000821	7.86%
Sr 421.552†	735.3	0.00101	mg/L	0.000014	0.00101	mg/L	0.000014	1.34%
Ti 334.903†	73.8	0.00419	mg/L	0.001188	0.00419	mg/L	0.001188	28.33%
Tl 190.801†	112.0	0.05239	mg/L	0.001664	0.05239	mg/L	0.001664	3.18%
V 292.402†	302.6	0.00288	mg/L	0.000141	0.00288	mg/L	0.000141	4.88%
Zn 206.200†	31.4	0.00918	mg/L	0.000543	0.00918	mg/L	0.000543	5.91%

Sequence No.: 41
Sample ID: ICSA

Dilution: 1.000000X

Autosampler Location: 357
Date Collected: 11/27/2012 4:42:59 PM
Data Type: Original

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	216.0 kPa	0.75 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2321198.1	105.0	%	0.55				0.52%
ScR 361.383	291056.7	106.0	%	0.86				0.81%
Ag 328.068†	-186.6	-0.00125	mg/L	0.000482	-0.00125	mg/L	0.000482	38.56%
Al 308.215†	273117.7	196.3	mg/L	1.05	196.3	mg/L	1.05	0.53%
As 188.979†	40.1	0.02017	mg/L	0.002251	0.02017	mg/L	0.002251	11.16%
B 249.677†	-17.2	-0.00263	mg/L	0.002549	-0.00263	mg/L	0.002549	96.86%
Ba 233.527†	111.7	-0.00359	mg/L	0.001614	-0.00359	mg/L	0.001614	44.91%
Be 313.042†	27.0	0.00005	mg/L	0.000011	0.00005	mg/L	0.000011	21.94%
Ca 317.933†	1195557.1	98.16	mg/L	0.516	98.16	mg/L	0.516	0.53%
Cd 228.802†	43.7	-0.00029	mg/L	0.000282	-0.00029	mg/L	0.000282	97.73%
Co 228.616†	58.2	-0.00081	mg/L	0.000197	-0.00081	mg/L	0.000197	24.42%
Cr 267.716†	10.6	-0.00015	mg/L	0.001269	-0.00015	mg/L	0.001269	863.29%
Cu 324.752†	-2520.6	-0.00372	mg/L	0.000149	-0.00372	mg/L	0.000149	4.00%
Fe 273.955†	242024.4	194.5	mg/L	0.94	194.5	mg/L	0.94	0.48%
K 766.490†	-14.1	-0.00808	mg/L	0.011805	-0.00808	mg/L	0.011805	146.15%
Mg 279.077†	120330.0	101.6	mg/L	1.34	101.6	mg/L	1.34	1.32%
Mn 257.610†	40.7	0.00122	mg/L	0.000205	0.00122	mg/L	0.000205	16.86%
Mo 202.031†	58.8	0.00228	mg/L	0.000457	0.00228	mg/L	0.000457	20.02%
Na 589.592†	157.8	0.01549	mg/L	0.002066	0.01549	mg/L	0.002066	13.34%
Na 330.237†	8.8	0.3547	mg/L	0.15095	0.3547	mg/L	0.15095	42.56%
Ni 231.604†	1.8	0.00049	mg/L	0.000716	0.00049	mg/L	0.000716	145.23%
Pb 220.353†	-297.2	-0.00283	mg/L	0.001698	-0.00283	mg/L	0.001698	59.91%
Sb 206.836†	21.5	0.00737	mg/L	0.001153	0.00737	mg/L	0.001153	15.63%
Se 196.026†	3.1	0.00242	mg/L	0.004900	0.00242	mg/L	0.004900	202.11%
Si 288.158†	-29.0	-0.00434	mg/L	0.002642	-0.00434	mg/L	0.002642	60.92%
Sn 189.927†	-63.6	-0.00661	mg/L	0.000517	-0.00661	mg/L	0.000517	7.82%
Sr 421.552†	2885.1	0.00395	mg/L	0.000081	0.00395	mg/L	0.000081	2.04%
Ti 334.903†	103.3	0.00120	mg/L	0.000494	0.00120	mg/L	0.000494	41.30%
Tl 190.801†	-35.2	0.00427	mg/L	0.000619	0.00427	mg/L	0.000619	14.49%
V 292.402†	1180.1	0.00435	mg/L	0.000176	0.00435	mg/L	0.000176	4.05%
Zn 206.200†	6.0	0.00176	mg/L	0.000467	0.00176	mg/L	0.000467	26.57%

Cont.

Sequence No.: 42
Sample ID: ICSAB

Dilution: 1.000000X

Autosampler Location: 358
Date Collected: 11/27/2012 4:47:15 PM
Data Type: Original

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2339882.5	105.8	%	0.26				0.24%
ScR 361.383	290849.8	105.9	%	1.07				1.01%
Ag 328.068†	148248.6	0.9961	mg/L	0.00162	0.9961	mg/L	0.00162	0.16%
Al 308.215†	270755.9	194.6	mg/L	0.37	194.6	mg/L	0.37	0.19%
As 188.979†	1605.0	1.024	mg/L	0.0024	1.024	mg/L	0.0024	0.23%
B 249.677†	-13.5	-0.00406	mg/L	0.000295	-0.00406	mg/L	0.000295	7.25%
Ba 233.527†	4009.6	0.9819	mg/L	0.00767	0.9819	mg/L	0.00767	0.78%
Be 313.042†	513180.4	0.9814	mg/L	0.00268	0.9814	mg/L	0.00268	0.27%
Ca 317.933†	1202916.9	98.77	mg/L	0.201	98.77	mg/L	0.201	0.20%
Cd 228.802†	25440.2	1.001	mg/L	0.0011	1.001	mg/L	0.0011	0.11%
Co 228.616†	32536.2	0.9687	mg/L	0.00146	0.9687	mg/L	0.00146	0.15%
Cr 267.716†	5606.1	1.006	mg/L	0.0104	1.006	mg/L	0.0104	1.03%
Cu 324.752†	212785.8	0.9752	mg/L	0.00115	0.9752	mg/L	0.00115	0.12%
Fe 273.955†	242413.6	194.8	mg/L	0.11	194.8	mg/L	0.11	0.06%
K 766.490†	-76.1	-0.04371	mg/L	0.006144	-0.04371	mg/L	0.006144	14.06%
Mg 279.077†	115698.2	97.72	mg/L	0.183	97.72	mg/L	0.183	0.19%
Mn 257.610†	31763.1	0.9696	mg/L	0.00305	0.9696	mg/L	0.00305	0.31%
Mo 202.031†	59.2	0.00224	mg/L	0.000484	0.00224	mg/L	0.000484	21.57%
Na 589.592†	270.1	0.02652	mg/L	0.003384	0.02652	mg/L	0.003384	12.76%
Na 330.237†	17.5	0.3851	mg/L	0.29705	0.3851	mg/L	0.29705	77.13%
Ni 231.604†	3487.4	0.9406	mg/L	0.00441	0.9406	mg/L	0.00441	0.47%
Pb 220.353†	6623.4	0.9711	mg/L	0.00144	0.9711	mg/L	0.00144	0.15%
Sb 206.836†	2904.3	1.004	mg/L	0.0021	1.004	mg/L	0.0021	0.21%
Se 196.026†	1266.2	0.9823	mg/L	0.00844	0.9823	mg/L	0.00844	0.86%
Si 288.158†	-30.9	-0.00226	mg/L	0.005126	-0.00226	mg/L	0.005126	226.33%
Sn 189.927†	-65.5	-0.00660	mg/L	0.001836	-0.00660	mg/L	0.001836	27.81%
Sr 421.552†	2848.0	0.00390	mg/L Cont.	0.000038	0.00390	mg/L	0.000038	0.98%
Ti 334.903†	105.6	0.00109	mg/L	0.000284	0.00109	mg/L	0.000284	25.92%
Tl 190.801†	1949.8	0.9241	mg/L	0.00411	0.9241	mg/L	0.00411	0.45%
V 292.402†	99265.9	0.9349	mg/L	0.00222	0.9349	mg/L	0.00222	0.24%
Zn 206.200†	3273.0	0.9552	mg/L	0.00861	0.9552	mg/L	0.00861	0.90%

Sequence No.: 43
Sample ID: CV 13

Autosampler Location: 7
Date Collected: 11/27/2012 4:51:03 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	216.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2355692.6	106.5	%	0.30				0.28%
ScR 361.383	293543.5	106.9	%	0.98				0.92%
Ag 328.068†	152975.5	1.028	mg/L	0.0051	1.028	mg/L	0.0051	0.49%
Al 308.215†	2846.0	2.012	mg/L	0.0170	2.012	mg/L	0.0170	0.85%
As 188.979†	3121.3	2.029	mg/L	0.0058	2.029	mg/L	0.0058	0.28%
B 249.677†	6354.4	0.9701	mg/L	0.00690	0.9701	mg/L	0.00690	0.71%
Ba 233.527†	3939.2	0.9956	mg/L	0.00981	0.9956	mg/L	0.00981	0.99%
Be 313.042†	508213.0	0.9719	mg/L	0.01388	0.9719	mg/L	0.01388	1.43%
Ca 317.933†	23661.4	1.943	mg/L	0.0250	1.943	mg/L	0.0250	1.29%
Cd 228.802†	25927.4	1.016	mg/L	0.0061	1.016	mg/L	0.0061	0.60%
Co 228.616†	33401.9	0.9952	mg/L	0.00668	0.9952	mg/L	0.00668	0.67%
Cr 267.716†	5639.2	1.014	mg/L	0.0098	1.014	mg/L	0.0098	0.96%
Cu 324.752†	219940.3	0.9994	mg/L	0.00494	0.9994	mg/L	0.00494	0.49%
Fe 273.955†	2578.8	2.065	mg/L	0.0223	2.065	mg/L	0.0223	1.08%
K 766.490†	34596.2	19.87	mg/L	0.249	19.87	mg/L	0.249	1.26%
Mg 279.077†	2389.8	2.028	mg/L	0.0178	2.028	mg/L	0.0178	0.88%
Mn 257.610†	32314.0	0.9866	mg/L	0.01291	0.9866	mg/L	0.01291	1.31%
Mo 202.031†	17463.5	0.9930	mg/L	0.00732	0.9930	mg/L	0.00732	0.74%
Na 589.592†	497046.7	48.80	mg/L	0.567	48.80	mg/L	0.567	1 16%
Na 330.237†	1314.5	52.50	mg/L	0.327	52.50	mg/L	0.327	0.62%
Ni 231.604†	3623.2	0.9774	mg/L	0.00921	0.9774	mg/L	0.00921	0.94%
Pb 220.353†	14054.0	1.978	mg/L	0.0121	1.978	mg/L	0.0121	0.61%
Sb 206.836†	6001.7	2.096	mg/L	0.0035	2.096	mg/L	0.0035	0.17%
Se 196.026†	2518.1	1.954	mg/L	0.0089	1.954	mg/L	0.0089	0.46%
Si 288.158†	3693.0	2.117	mg/L	0.0184	2.117	mg/L	0.0184	0.87%
Sn 189.927†	3424.3	1.011	mg/L	0.0025	1.011	mg/L	0.0025	0.24%
Sr 421.552†	702984.6	0.9634	mg/L	0.01176	0.9634	mg/L	0.01176	1.22%
Ti 334.903†	17997.2	1.023	mg/L	0.0126	1.023	mg/L	0.0126	1.23%
Tl 190.801†	4238.9	1.975	mg/L	0.0054	1.975	mg/L	0.0054	0.27%
V 292.402†	103533.7	0.9819	mg/L	0.00606	0.9819	mg/L	0.00606	0.62%
Zn 206.200†	3526.3	1.029	mg/L	0.0095	1.029	mg/L	0.0095	0.92%

Sequence No.: 44
Sample ID: CB 10

Autosampler Location: 1
Date Collected: 11/27/2012 4:56:08 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2360513.3	106.8	%	0.55				0.52%
ScR 361.383	294551.6	107.2	%	0.28				0.26%
Ag 328.068†	-22.7	-0.00015	mg/L	0.000237	-0.00015	mg/L	0.000237	155.72%
Al 308.215†	-0.4	-0.00027	mg/L	0.001294	-0.00027	mg/L	0.001294	483.41%
As 188.979†	2.8	0.00177	mg/L	0.001274	0.00177	mg/L	0.001274	71.94%
B 249.677†	5.9	0.00090	mg/L	0.001461	0.00090	mg/L	0.001461	161.80%
Ba 233.527†	-0.3	-0.00008	mg/L	0.000981	-0.00008	mg/L	0.000981	>999.9%
Be 313.042†	-2.5	-0.00000	mg/L	0.000009	-0.00000	mg/L	0.000009	192.79%
Ca 317.933†	8.6	0.00071	mg/L	0.001129	0.00071	mg/L	0.001129	160.02%
Cd 228.802†	-3.7	-0.00016	mg/L	0.000129	-0.00016	mg/L	0.000129	81.80%
Co 228.616†	10.2	0.00031	mg/L	0.000032	0.00031	mg/L	0.000032	10.53%
Cr 267.716†	4.2	0.00076	mg/L	0.001456	0.00076	mg/L	0.001456	191.69%
Cu 324.752†	-732.6	-0.00333	mg/L	0.000105	-0.00333	mg/L	0.000105	3.15%
Fe 273.955†	3.0	0.00239	mg/L	0.002316	0.00239	mg/L	0.002316	96.96%
K 766.490†	-47.8	-0.02746	mg/L	0.009601	-0.02746	mg/L	0.009601	34.96%
Mg 279.077†	-0.8	-0.00067	mg/L	0.002035	-0.00067	mg/L	0.002035	304.90%
Mn 257.610†	2.8	0.00009	mg/L	0.000087	0.00009	mg/L	0.000087	100.90%
Mo 202.031†	8.3	0.00047	mg/L	0.000329	0.00047	mg/L	0.000329	69.63%
Na 589.592†	6.5	0.00064	mg/L	0.004989	0.00064	mg/L	0.004989	779.63%
Na 330.237†	18.0	0.7205	mg/L	0.49021	0.7205	mg/L	0.49021	68.03%
Ni 231.604†	1.1	0.00030	mg/L	0.001041	0.00030	mg/L	0.001041	342.11%
Pb 220.353†	12.9	0.00182	mg/L	0.000997	0.00182	mg/L	0.000997	54.69%
Sb 206.836†	3.9	0.00135	mg/L	0.001237	0.00135	mg/L	0.001237	91.58%
Se 196.026†	2.6	0.00198	mg/L	0.002872	0.00198	mg/L	0.002872	144.89%
Si 288.158†	3.5	0.00200	mg/L	0.006138	0.00200	mg/L	0.006138	306.24%
Sn 189.927†	2.4	0.00070	mg/L	0.000555	0.00070	mg/L	0.000555	79.40%
Sr 421.552†	34.9	0.00005	mg/L	0.000043	0.00005	mg/L	0.000043	89.74%
Ti 334.903†	1.5	0.00009	mg/L	0.000209	0.00009	mg/L	0.000209	240.57%
Tl 190.801†	11.4	0.00531	mg/L	0.001210	0.00531	mg/L	0.001210	22.78%
V 292.402†	-5.1	-0.00004	mg/L	0.000046	-0.00004	mg/L	0.000046	103.06%
Zn 206.200†	0.6	0.00018	mg/L	0.000283	0.00018	mg/L	0.000283	155.54%

Sequence No.: 45
Sample ID: VR80 C TWC

Dilution: 1.000000X

Autosampler Location: 359
Date Collected: 11/27/2012 5:00:23 PM
Data Type: Original

Nebulizer Parameters: VR80 C TWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VR80 C TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2364837.0	107.0	%	0.85				0.80%
ScR 361.383	297182.6	108.2	%	0.46				0.42%
Ag 328.068†	-13.1	-0.00009	mg/L	0.000336	-0.00009	mg/L	0.000336	382.22%
Al 308.215†	150.8	0.1084	mg/L	0.00302	0.1084	mg/L	0.00302	2.79%
As 188.979†	11.1	0.00656	mg/L	0.000936	0.00656	mg/L	0.000936	14.26%
B 249.677†	119.9	0.01833	mg/L	0.000764	0.01833	mg/L	0.000764	4.17%
Ba 233.527†	32.3	0.00810	mg/L	0.000530	0.00810	mg/L	0.000530	6.54%
Be 313.042†	-23.3	-0.00004	mg/L	0.000042	-0.00004	mg/L	0.000042	92.82%
Ca 317.933†	138389.9	11.36	mg/L	0.049	11.36	mg/L	0.049	0.43%
Cd 228.802†	-2.3	-0.00014	mg/L	0.000080	-0.00014	mg/L	0.000080	57.08%
Co 228.616†	9.6	0.00027	mg/L	0.000168	0.00027	mg/L	0.000168	61.69%
Cr 267.716†	10.5	0.00137	mg/L	0.000817	0.00137	mg/L	0.000817	59.46%
Cu 324.752†	195.9	0.00086	mg/L	0.000041	0.00086	mg/L	0.000041	4.79%
Fe 273.955†	497.7	0.4000	mg/L	0.00121	0.4000	mg/L	0.00121	0.30%
K 766.490†	3320.1	1.907	mg/L	0.0145	1.907	mg/L	0.0145	0.76%
Mg 279.077†	5882.8	4.973	mg/L	0.0544	4.973	mg/L	0.0544	1.09%
Mn 257.610†	1063.1	0.03242	mg/L	0.000235	0.03242	mg/L	0.000235	0.73%
Mo 202.031†	21.5	0.00110	mg/L	0.000122	0.00110	mg/L	0.000122	11.09%
Na 589.592†	53966.0	5.298	mg/L	0.0150	5.298	mg/L	0.0150	0.28%
Na 330.237†	154.3	6.175	mg/L	0.3784	6.175	mg/L	0.3784	6.13%
Ni 231.604†	11.2	0.00303	mg/L	0.000974	0.00303	mg/L	0.000974	32.17%
Pb 220.353†	4.3	0.00061	mg/L	0.000684	0.00061	mg/L	0.000684	111.45%
Sb 206.836†	-0.5	-0.00022	mg/L	0.001448	-0.00022	mg/L	0.001448	644.71%
Se 196.026†	-5.9	-0.00456	mg/L	0.001771	-0.00456	mg/L	0.001771	38.85%
Si 288.158†	9906.5	5.683	mg/L	0.0581	5.683	mg/L	0.0581	1.02%
Sn 189.927†	-16.7	-0.00352	mg/L	0.000709	-0.00352	mg/L	0.000709	20.11%
Sr 421.552†	50072.3	0.06862	mg/L	0.000296	0.06862	mg/L	0.000296	0.43%
Ti 334.903†	74.3	0.00369	mg/L	0.001449	0.00369	mg/L	0.001449	39.27%
Tl 190.801†	8.3	0.00393	mg/L	0.001738	0.00393	mg/L	0.001738	44.23%
V 292.402†	121.5	0.00114	mg/L	0.000065	0.00114	mg/L	0.000065	5.70%
Zn 206.200†	15.4	0.00449	mg/L	0.000546	0.00449	mg/L	0.000546	12.14%

Sequence No.: 46
Sample ID: VR82 F SWC

Dilution: 2.000000X

Del

Autosampler Location: 360
Date Collected: 11/27/2012 5:04:38 PM
Data Type: Original

Nebulizer Parameters: VR82 F SWC

Analyte	Back Pressure	Flow
All	216.0 kPa	0.75 L/min

Mean Data: VR82 F SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2394232.2	108.3	%	0.70				0.64%
ScR 361.383	303121.2	110.4	%	0.70				0.64%
Ag 328.068†	-47.8	-0.00027	mg/L	0.000194	-0.00055	mg/L	0.000388	70.50%
Al 308.215†	67145.0	48.25	mg/L	0.379	96.51	mg/L	0.758	0.79%
As 188.979†	-87.5	0.02397	mg/L	0.002194	0.04795	mg/L	0.004388	9.15%
B 249.677†	75.5	0.01146	mg/L	0.000279	0.02292	mg/L	0.000558	2.43%
Ba 233.527†	1341.4	0.3268	mg/L	0.00206	0.6536	mg/L	0.00412	0.63%
Be 313.042†	438.6	0.00077	mg/L	0.000021	0.00155	mg/L	0.000042	2.73%
Ca 317.933†	242871.3	19.94	mg/L	0.207	39.88	mg/L	0.415	1.04%
Cd 228.802†	53.5	0.00190	mg/L	0.000109	0.00379	mg/L	0.000218	5.75%
Co 228.616†	1424.4	0.03600	mg/L	0.000284	0.07200	mg/L	0.000569	0.79%
Cr 267.716†	788.4	0.1426	mg/L	0.00188	0.2853	mg/L	0.00376	1.32%
Cu 324.752†	20926.0	0.09771	mg/L	0.000732	0.1954	mg/L	0.00146	0.75%
Fe 273.955†	93915.3	75.47	mg/L	0.573	150.9	mg/L	1.15	0.76%
K 766.490†	4219.0	2.423	mg/L	0.0470	4.846	mg/L	0.0940	1.94%
Mg 279.077†	23734.8	20.03	mg/L	0.128	40.05	mg/L	0.256	0.64%
Mn 257.610†	62009.5	1.893	mg/L	0.0142	3.786	mg/L	0.0285	0.75%
Mo 202.031†	49.2	0.00257	mg/L	0.000125	0.00515	mg/L	0.000250	4.85%
Na 589.592†	9656.4	0.9481	mg/L	0.00471	1.896	mg/L	0.0094	0.50%
Na 330.237†	23.5	1.449	mg/L	0.0634	2.897	mg/L	0.1267	4.37%
Ni 231.604†	513.1	0.1384	mg/L	0.00131	0.2767	mg/L	0.00262	0.95%
Pb 220.353†	454.2	0.07249	mg/L	0.001779	0.1450	mg/L	0.00356	2.45%
Sb 206.836†	6.4	0.00203	mg/L	0.000329	0.00406	mg/L	0.000658	16.18%
Se 196.026†	4.3	0.00326	mg/L	0.002005	0.00651	mg/L	0.004011	61.61%
Si 288.158†	12620.0	7.241	mg/L	0.0490	14.48	mg/L	0.098	0.68%
Sn 189.927†	-13.1	-0.00100	mg/L	0.001055	-0.00199	mg/L	0.002110	105.82%
Sr 421.552†	96748.3	0.1326	mg/L	0.00099	0.2652	mg/L	0.00199	0.75%
Ti 334.903†	49987.3	2.845	mg/L	0.0243	5.690	mg/L	0.0485	0.85%
Tl 190.801†	-3.9	0.00542	mg/L	0.000614	0.01083	mg/L	0.001227	11.33%
V 292.402†	16854.6	0.1558	mg/L	0.00092	0.3116	mg/L	0.00184	0.59%
Zn 206.200†	1465.5	0.4277	mg/L	0.00419	0.8554	mg/L	0.00838	0.98%

Sequence No.: 47
Sample ID: VR82 G SWC

Dilution: 2.000000X

Del

Autosampler Location: 361
Date Collected: 11/27/2012 5:08:37 PM
Data Type: Original

Nebulizer Parameters: VR82 G SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VR82 G SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2397849.6	108.5	%	0.85				0.78%
ScR 361.383	302716.8	110.2	%	0.83				0.75%
Ag 328.068†	-67.2	-0.00040	mg/L	0.000055	-0.00081	mg/L	0.000109	13.48%
Al 308.215†	70561.6	50.71	mg/L	0.688	101.4	mg/L	1.38	1.36%
As 188.979†	-94.5	0.02137	mg/L	0.004160	0.04275	mg/L	0.008320	19.46%
B 249.677†	73.4	0.01114	mg/L	0.001974	0.02227	mg/L	0.003947	17.72%
Ba 233.527†	1422.7	0.3471	mg/L	0.00394	0.6941	mg/L	0.00788	1.13%
Be 313.042†	458.6	0.00081	mg/L	0.000031	0.00162	mg/L	0.000062	3.80%
Ca 317.933†	241937.2	19.86	mg/L	0.300	39.73	mg/L	0.600	1.51%
Cd 228.802†	50.7	0.00180	mg/L	0.000041	0.00361	mg/L	0.000083	2.29%
Co 228.616†	1440.4	0.03632	mg/L	0.000260	0.07264	mg/L	0.000521	0.72%
Cr 267.716†	853.0	0.1543	mg/L	0.00097	0.3085	mg/L	0.00195	0.63%
Cu 324.752†	19902.6	0.09312	mg/L	0.001259	0.1862	mg/L	0.00252	1.35%
Fe 273.955†	96192.5	77.30	mg/L	1.349	154.6	mg/L	2.70	1.74%
K 766.490†	4466.6	2.565	mg/L	0.0446	5.130	mg/L	0.0892	1.74%
Mg 279.077†	24872.6	20.99	mg/L	0.207	41.97	mg/L	0.414	0.99%
Mn 257.610†	61905.1	1.890	mg/L	0.0307	3.779	mg/L	0.0614	1.63%
Mo 202.031†	47.4	0.00247	mg/L	0.000081	0.00494	mg/L	0.000161	3.26%
Na 589.592†	9773.9	0.9596	mg/L	0.00979	1.919	mg/L	0.0196	1.02%
Na 330.237†	20.9	1.360	mg/L	0.2493	2.720	mg/L	0.4986	18.33%
Ni 231.604†	532.9	0.1437	mg/L	0.00205	0.2874	mg/L	0.00410	1.43%
Pb 220.353†	434.4	0.07023	mg/L	0.000239	0.1405	mg/L	0.00048	0.34%
Sb 206.836†	3.0	0.00068	mg/L	0.003176	0.00137	mg/L	0.006353	465.32%
Se 196.026†	1.2	0.00079	mg/L	0.003777	0.00157	mg/L	0.007554	480.51%
Si 288.158†	12223.6	7.014	mg/L	0.0673	14.03	mg/L	0.135	0.96%
Sn 189.927†	-25.5	-0.00466	mg/L	0.000827	-0.00931	mg/L	0.001653	17.76%
Sr 421.552†	97885.9	0.1342	mg/L	0.00184	0.2683	mg/L	0.00368	1.37%
Ti 334.903†	51182.3	2.913	mg/L	0.0438	5.826	mg/L	0.0877	1.51%
Tl 190.801†	-3.4	0.00583	mg/L	0.001034	0.01166	mg/L	0.002068	17.73%
V 292.402†	17284.4	0.1598	mg/L	0.00173	0.3196	mg/L	0.00345	1.08%
Zn 206.200†	1445.1	0.4217	mg/L	0.00542	0.8435	mg/L	0.01084	1.28%

Sequence No.: 48
Sample ID: VR82 H SWC

Dilution: 2.000000X

Del

Autosampler Location: 362
Date Collected: 11/27/2012 5:12:37 PM
Data Type: Original

Nebulizer Parameters: VR82 H SWC

Analyte	Back Pressure	Flow
All	216.0 kPa	0.75 L/min

Mean Data: VR82 H SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2387165.7	108.0	%	0.32				0.30%
ScR 361.383	303951.5	110.7	%	0.47				0.42%
Ag 328.068†	-101.5	-0.00063	mg/L	0.000205	-0.00125	mg/L	0.000410	32.71%
Al 308.215†	86059.6	61.85	mg/L	0.165	123.7	mg/L	0.33	0.27%
As 188.979†	-120.8	0.02262	mg/L	0.001125	0.04524	mg/L	0.002250	4.97%
B 249.677†	80.4	0.01220	mg/L	0.000741	0.02439	mg/L	0.001481	6.07%
Ba 233.527†	1538.9	0.3744	mg/L	0.00396	0.7488	mg/L	0.00792	1.06%
Be 313.042†	514.6	0.00090	mg/L	0.000037	0.00181	mg/L	0.000073	4.06%
Ca 317.933†	261075.9	21.44	mg/L	0.075	42.87	mg/L	0.150	0.35%
Cd 228.802†	59.1	0.00215	mg/L	0.000135	0.00429	mg/L	0.000269	6.27%
Co 228.616†	1641.6	0.04092	mg/L	0.000418	0.08185	mg/L	0.000836	1.02%
Cr 267.716†	1021.8	0.1848	mg/L	0.00235	0.3696	mg/L	0.00469	1.27%
Cu 324.752†	23290.8	0.1089	mg/L	0.00027	0.2178	mg/L	0.00054	0.25%
Fe 273.955†	111758.3	89.81	mg/L	0.186	179.6	mg/L	0.37	0.21%
K 766.490†	5160.1	2.963	mg/L	0.0279	5.927	mg/L	0.0558	0.94%
Mg 279.077†	29027.4	24.49	mg/L	0.311	48.99	mg/L	0.622	1.27%
Mn 257.610†	65516.3	2.000	mg/L	0.0052	4.000	mg/L	0.0104	0.26%
Mo 202.031†	47.7	0.00247	mg/L	0.000153	0.00494	mg/L	0.000305	6.18%
Na 589.592†	11877.8	1.166	mg/L	0.0032	2.332	mg/L	0.0065	0.28%
Na 330.237†	20.1	1.458	mg/L	0.0635	2.917	mg/L	0.1270	4.35%
Ni 231.604†	612.2	0.1651	mg/L	0.00194	0.3302	mg/L	0.00388	1.18%
Pb 220.353†	534.7	0.08653	mg/L	0.000677	0.1731	mg/L	0.00135	0.78%
Sb 206.836†	5.7	0.00153	mg/L	0.002936	0.00307	mg/L	0.005871	191.45%
Se 196.026†	0.6	0.00037	mg/L	0.006047	0.00074	mg/L	0.012094	>999.9%
Si 288.158†	13437.4	7.710	mg/L	0.0968	15.42	mg/L	0.194	1.26%
Sn 189.927†	-28.8	-0.00533	mg/L	0.000430	-0.01066	mg/L	0.000859	8.06%
Sr 421.552†	103963.3	0.1425	mg/L	0.00044	0.2850	mg/L	0.00089	0.31%
Ti 334.903†	62400.2	3.552	mg/L	0.0088	7.103	mg/L	0.0176	0.25%
Tl 190.801†	-7.2	0.00524	mg/L	0.003135	0.01047	mg/L	0.006269	59.87%
V 292.402†	19931.5	0.1841	mg/L	0.00053	0.3683	mg/L	0.00107	0.29%
Zn 206.200†	1601.1	0.4673	mg/L	0.00624	0.9346	mg/L	0.01249	1.34%

Sequence No.: 49
Sample ID: VR82 I SWC

Dilution: 2.000000X

Del

Autosampler Location: 363
Date Collected: 11/27/2012 5:16:36 PM
Data Type: Original

Nebulizer Parameters: VR82 I SWC

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: VR82 I SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2359279.0	106.7	%	0.49				0.46%
ScR 361.383	299897.2	109.2	%	0.38				0.35%
Ag 328.068†	-55.2	-0.00032	mg/L	0.000109	-0.00064	mg/L	0.000218	33.91%
Al 308.215†	76175.6	54.74	mg/L	0.249	109.5	mg/L	0.50	0.46%
As 188.979†	-105.7	0.02110	mg/L	0.000895	0.04221	mg/L	0.001789	4.24%
B 249.677†	67.9	0.01030	mg/L	0.000373	0.02060	mg/L	0.000747	3.63%
Ba 233.527†	1389.6	0.3384	mg/L	0.00199	0.6768	mg/L	0.00398	0.59%
Be 313.042†	483.2	0.00085	mg/L	0.000031	0.00170	mg/L	0.000061	3.59%
Ca 317.933†	242372.5	19.90	mg/L	0.117	39.80	mg/L	0.233	0.59%
Cd 228.802†	54.8	0.00199	mg/L	0.000250	0.00399	mg/L	0.000499	12.53%
Co 228.616†	1414.3	0.03505	mg/L	0.000161	0.07010	mg/L	0.000322	0.46%
Cr 267.716†	902.6	0.1633	mg/L	0.00144	0.3265	mg/L	0.00288	0.88%
Cu 324.752†	21254.0	0.09928	mg/L	0.000207	0.1986	mg/L	0.00041	0.21%
Fe 273.955†	98323.3	79.01	mg/L	0.599	158.0	mg/L	1.20	0.76%
K 766.490†	4770.1	2.739	mg/L	0.0406	5.479	mg/L	0.0812	1.48%
Mg 279.077†	25060.4	21.15	mg/L	0.076	42.29	mg/L	0.152	0.36%
Mn 257.610†	56315.3	1.719	mg/L	0.0110	3.438	mg/L	0.0221	0.64%
Mo 202.031†	46.1	0.00240	mg/L	0.000393	0.00480	mg/L	0.000787	16.41%
Na 589.592†	10408.7	1.022	mg/L	0.0074	2.044	mg/L	0.0149	0.73%
Na 330.237†	18.5	1.314	mg/L	0.0996	2.628	mg/L	0.1992	7.58%
Ni 231.604†	522.2	0.1408	mg/L	0.00097	0.2817	mg/L	0.00195	0.69%
Pb 220.353†	519.0	0.08305	mg/L	0.001268	0.1661	mg/L	0.00254	1.53%
Sb 206.836†	6.0	0.00174	mg/L	0.002032	0.00348	mg/L	0.004064	116.79%
Se 196.026†	7.7	0.00590	mg/L	0.004241	0.01179	mg/L	0.008482	71.93%
Si 288.158†	13480.9	7.735	mg/L	0.0109	15.47	mg/L	0.022	0.14%
Sn 189.927†	-21.5	-0.00342	mg/L	0.000916	-0.00685	mg/L	0.001833	26.76%
Sr 421.552†	95490.6	0.1309	mg/L	0.00058	0.2617	mg/L	0.00117	0.45%
Ti 334.903†	55443.6	3.156	mg/L	0.0179	6.311	mg/L	0.0359	0.57%
Tl 190.801†	-2.4	0.00644	mg/L	0.004983	0.01287	mg/L	0.009967	77.41%
V 292.402†	17896.5	0.1654	mg/L	0.00056	0.3308	mg/L	0.00113	0.34%
Zn 206.200†	1494.1	0.4360	mg/L	0.00280	0.8721	mg/L	0.00560	0.64%

Sequence No.: 50
Sample ID: CV 14

Autosampler Location: 7
Date Collected: 11/27/2012 5:20:35 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	215.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2318279.9	104.9	%	0.33				0.32%
ScR 361.383	292649.2	106.5	%	0.99				0.93%
Ag 328.068†	154195.5	1.036	mg/L	0.0038	1.036	mg/L	0.0038	0.36%
Al 308.215†	2834.3	2.003	mg/L	0.0290	2.003	mg/L	0.0290	1.45%
As 188.979†	3163.2	2.056	mg/L	0.0137	2.056	mg/L	0.0137	0.67%
B 249.677†	6336.1	0.9673	mg/L	0.01407	0.9673	mg/L	0.01407	1.45%
Ba 233.527†	3945.3	0.9972	mg/L	0.01424	0.9972	mg/L	0.01424	1.43%
Be 313.042†	513495.9	0.9820	mg/L	0.01130	0.9820	mg/L	0.01130	1.15%
Ca 317.933†	23520.0	1.931	mg/L	0.0211	1.931	mg/L	0.0211	1.10%
Cd 228.802†	26126.3	1.024	mg/L	0.0059	1.024	mg/L	0.0059	0.57%
Co 228.616†	33638.0	1.002	mg/L	0.0055	1.002	mg/L	0.0055	0.55%
Cr 267.716†	5627.6	1.012	mg/L	0.0136	1.012	mg/L	0.0136	1.34%
Cu 324.752†	221814.3	1.008	mg/L	0.0034	1.008	mg/L	0.0034	0.34%
Fe 273.955†	2542.9	2.037	mg/L	0.0211	2.037	mg/L	0.0211	1.03%
K 766.490†	34448.4	19.78	mg/L	0.127	19.78	mg/L	0.127	0.64%
Mg 279.077†	2373.2	2.014	mg/L	0.0208	2.014	mg/L	0.0208	1.03%
Mn 257.610†	32256.3	0.9849	mg/L	0.01014	0.9849	mg/L	0.01014	1.03%
Mo 202.031†	17591.5	1.000	mg/L	0.0073	1.000	mg/L	0.0073	0.73%
Na 589.592†	495325.8	48.63	mg/L	0.452	48.63	mg/L	0.452	0.93%
Na 330.237†	1310.6	52.35	mg/L	0.576	52.35	mg/L	0.576	1.10%
Ni 231.604†	3625.2	0.9779	mg/L	0.01181	0.9779	mg/L	0.01181	1.21%
Pb 220.353†	14133.4	1.990	mg/L	0.0125	1.990	mg/L	0.0125	0.63%
Sb 206.836†	6064.2	2.118	mg/L	0.0104	2.118	mg/L	0.0104	0.49%
Se 196.026†	2534.0	1.967	mg/L	0.0103	1.967	mg/L	0.0103	0.52%
Si 288.158†	3701.6	2.122	mg/L	0.0290	2.122	mg/L	0.0290	1.37%
Sn 189.927†	3471.5	1.025	mg/L	0.0067	1.025	mg/L	0.0067	0.65%
Sr 421.552†	701280.8	0.9611	mg/L	0.00819	0.9611	mg/L	0.00819	0.85%
Ti 334.903†	18044.5	1.026	mg/L	0.0112	1.026	mg/L	0.0112	1.09%
Tl 190.801†	4288.0	1.998	mg/L	0.0122	1.998	mg/L	0.0122	0.61%
V 292.402†	104073.3	0.9870	mg/L	0.00449	0.9870	mg/L	0.00449	0.45%
Zn 206.200†	3509.9	1.024	mg/L	0.0141	1.024	mg/L	0.0141	1.38%

Sequence No.: 51
Sample ID: CB 11

Autosampler Location: 1
Date Collected: 11/27/2012 5:25:40 PM
Data Type: Original

Dilution: 1.000000X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	217.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2361506.7	106.8	%	0.86				0.80%
ScR 361.383	297716.5	108.4	%	0.74				0.68%
Ag 328.068†	-3.1	-0.00002	mg/L	0.000191	-0.00002	mg/L	0.000191	915.44%
Al 308.215†	-7.9	-0.00566	mg/L	0.001586	-0.00566	mg/L	0.001586	28.02%
As 188.979†	0.4	0.00028	mg/L	0.001045	0.00028	mg/L	0.001045	376.76%
B 249.677†	7.3	0.00112	mg/L	0.000595	0.00112	mg/L	0.000595	53.08%
Ba 233.527†	0.2	0.00006	mg/L	0.000372	0.00006	mg/L	0.000372	623.05%
Be 313.042†	1.8	0.00000	mg/L	0.000028	0.00000	mg/L	0.000028	839.67%
Ca 317.933†	0.2	0.00002	mg/L	0.000623	0.00002	mg/L	0.000623	>999.9%
Cd 228.802†	-3.3	-0.00013	mg/L	0.000119	-0.00013	mg/L	0.000119	89.78%
Co 228.616†	2.5	0.00007	mg/L	0.000091	0.00007	mg/L	0.000091	120.96%
Cr 267.716†	5.5	0.00100	mg/L	0.000851	0.00100	mg/L	0.000851	85.32%
Cu 324.752†	-747.0	-0.00340	mg/L	0.000072	-0.00340	mg/L	0.000072	2.13%
Fe 273.955†	2.4	0.00195	mg/L	0.000965	0.00195	mg/L	0.000965	49.50%
K 766.490†	-44.0	-0.02529	mg/L	0.023902	-0.02529	mg/L	0.023902	94.50%
Mg 279.077†	-5.2	-0.00437	mg/L	0.001219	-0.00437	mg/L	0.001219	27.91%
Mn 257.610†	2.8	0.00009	mg/L	0.000059	0.00009	mg/L	0.000059	67.52%
Mo 202.031†	1.7	0.00010	mg/L	0.000234	0.00010	mg/L	0.000234	242.71%
Na 589.592†	42.2	0.00415	mg/L	0.001319	0.00415	mg/L	0.001319	31.83%
Na 330.237†	11.6	0.4626	mg/L	0.35522	0.4626	mg/L	0.35522	76.79%
Ni 231.604†	1.9	0.00052	mg/L	0.000479	0.00052	mg/L	0.000479	91.65%
Pb 220.353†	3.9	0.00056	mg/L	0.000795	0.00056	mg/L	0.000795	142.13%
Sb 206.836†	3.8	0.00130	mg/L	0.001033	0.00130	mg/L	0.001033	79.66%
Se 196.026†	-4.7	-0.00362	mg/L	0.001437	-0.00362	mg/L	0.001437	39.73%
Si 288.158†	-1.1	-0.00066	mg/L	0.004280	-0.00066	mg/L	0.004280	650.84%
Sn 189.927†	0.3	0.00008	mg/L	0.000713	0.00008	mg/L	0.000713	866.42%
Sr 421.552†	29.9	0.00004	mg/L	0.000036	0.00004	mg/L	0.000036	87.20%
Ti 334.903†	7.6	0.00043	mg/L	0.000522	0.00043	mg/L	0.000522	120.75%
Tl 190.801†	11.3	0.00529	mg/L	0.002203	0.00529	mg/L	0.002203	41.62%
V 292.402†	-10.9	-0.00010	mg/L	0.000062	-0.00010	mg/L	0.000062	62.84%
Zn 206.200†	2.7	0.00080	mg/L	0.000535	0.00080	mg/L	0.000535	66.85%

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Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: 11-12-12 Analysis Date: 11-26-12 Analyst: BA

LR Date: 7-30-12 Page: 1 of 5

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		STD 0			2994-8 Scr noisy
		2			-11 Scr noisy
		3			-12 Be sl. noisy
		4			-13
		5			-14
		0			-8
		2			-11 Scr very noisy
		2			
		~~ICV~~ ZZZZZZ BA 11/27/12			2988-6 Fe Mg Na Sb Si Ti ↑
		STD 4			
		5			
		ICV			Si ↑ (NR)
		ICB			
		CRI			
		ICSA			
		ICSAB			
		HiPur QC7			
		Spex QC21			
		DI Check			
		CCV1			Sb ↑ (N.R.)
		CCB1			
		V521 mB1	SWC	2	
		V520 E	↓	5	
		V521 B	↓	↓	

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Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: — Analysis Date: 11-26-12 Analyst: BA

LR Date: — Page: 2 of 5

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		VS21 C	SWC	5	
		A-L		25	ScR sl. noisy-
		A		5	
		ADUP			
		ASPK			Al, Fe, Mg, Mn STL
		~~APOST~~ ZZZZZZ EA 11/30/12			0.08 mL ICP Spike 2977-9
		MBISPK		2	
		CCV2			Sb (NR) ScR sl. noisy - levels OK.
		CCB2			
		VS21 D	SWC	5	
		E			
		F			
		G			
		H			
		I			
		J			
		K			
		L			
		CCV3			Sb, Si ↑ (NR)
		CCB3			Mn > RL (0.00117 mg/L) ScR sl. noisy
		CCB4			
		CRI			Mn > 150%
		ICSA			
		ICSAB			

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Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: — Analysis Date: 11-26-12 Analyst: BA

LR Date: — Page: 3 of 5

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		CCV4			Sb, Si ↑ (NR)
		CCB5			End VS20, VS21
		VS36 MB	TWC		
		B			
		C			
		D			
		E			
		F			
		ADUP		✓	
		A			
		ASPK		✓	
		MBSPK		✓	
		CCV5			Sb↑ (NR)
		CCB6			
		VS36 G	TWC		
		H			
		I			
		CCV6			Scr sl. noisy - levels OK.
		CCB7			Scr noisy - SDs OK.
		VR80 MB1	TWC		
		B			
	✓	C			Scr/analytes noisy.
		D			
		ADUP		✓	

Analytical Resources, Incorporated
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SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: — Analysis Date: 11-26-12 Analyst: BA

LR Date: — Page: 4 of 5

All corrections made by analyst unless otherwise noted. BA 11-28-12

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		VR80 A	TWC		
		ASPK		✓	
✓✓		~~APOST~~ zzzzzz BA 12/7/12		✓	0.08 mL ICP Spike 2977-9
		MBISPK			
		CCV7			Sb↑ (NR)
		CCB8			End VR80
		VS45 MBI	TWC		
		B			
		C			
		D			
		A-L		5 ✓	
		A			
		ADUP		✓	
		ASPK		✓	Sl. noisy Ca↓ (49%) (CAF)
		APOST			0.08 mL ICP Spike 2977-9 Ca OK (77.4%)
		MBISPK			Sl. noisy - Levels OK
		CCV8			Sb↑ (NR)
		CCB9			
		VS45 E	TWC		
Label		F			12/11/12
		CCV9			Sb, Si↑ (NR)
		CCB10			
		CRI			Cr, Fe > 150%
		ICSA			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

SAMPLE RUN LOG-ICP-OES-02
Perkin Elmer OPTIMA 7500
Serial No. – 077C8121202

IEC Date: — Analysis Date: 11-26-12 Analyst: BA

LR Date: — Page: 5 of 5

All corrections made by analyst unless otherwise noted. BA 11-28-12

Edit Label	Delete Data	ARI Sample ID	Prep. Code	Dilution	Comments
		ICSAB			
		CCV10			Sb↑ (NR) Sl. noisy -Levels OK
		CCB11			End Pkg
		VS49 MB1	TWC		
		B			
		ADUP		✓	
		A			
		ASPK		✓	
		MB1SPK		✓	Ca, Mg STL Sl. noisy - Levels OK
		CCV11			Si ↑ (NR)
		CCB12			
		Rinse / DI			
		BA 11/27/12			

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: (ICP) ICP-MS GFA CVA Analysis Date: 11-26-12

ICP-2	Analyst BA 11/26/12	Peer # 11-290	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	See log
Standard deviations	✓	✓	↓
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	See log
ICB/CCB	✓	✓	↓
Samples:			
RSD's & SD's	✓	✓	See log
Internal Standards	✓	✓	↓
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	See log
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	—	See log (VS45)
Matrix Duplicates	✓	—	
Method Blanks	✓	—	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	CAF-VS45

==========

Analysis Begun

Start Time: 11/26/2012 11:14:32 AM
Plasma On Time: 11/26/2012 8:17:31 AM
Logged In Analyst: Metals
Technique: ICP Continuous
Spectrometer: Optima 7300 DV, S/N 077C8121202
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\CRISETMON.sif
Batch ID:
Results Data Set: I2121126
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

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Method Loaded
Method Name: 7300bcESI2FAST
Method Last Saved: 11/26/2012 10:06:01 AM
IEC File: IEC110912.iec
MSF File:
Method Description: 12Axial Elements

Analyte	Calibration Equation	Processing	View	Internal Standard	IEC
Ag 328.068	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Al 308.215	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
As 188.979	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
B 249.677	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Ba 233.527	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Be 313.042	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Ca 317.933	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Cd 228.802	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Co 228.616	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Cr 267.716	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Cu 324.752	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Fe 273.955	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
K 766.490	Lin Thru 0	Peak Area	Radial	ScR 361.383	No
Mg 279.077	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Mn 257.610	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Mo 202.031	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Na 589.592	Lin Thru 0	Peak Area	Radial	ScR 361.383	No
Na 330.237	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Ni 231.604	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Pb 220.353	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Sb 206.836	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Se 196.026	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Si 288.158	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Sn 189.927	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Sr 421.552	Lin Thru 0	Peak Area	Radial	ScR 361.383	No
Ti 334.903	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
Tl 190.801	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
V 292.402	Lin Thru 0	Peak Area	Axial	ScA 357.253	Yes
Zn 206.200	Lin Thru 0	Peak Area	Radial	ScR 361.383	Yes
ScA 357.253	Lin, Calc Int	Peak Area	Axial	n/a	n/a
ScR 361.383	Lin, Calc Int	Peak Area	Radial	n/a	n/a

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Sequence No.: 1
Autosampler Location: 1
Sample ID: Calib Blank 1
Date Collected: 11/26/2012 11:14:34 AM
Data Type: Original

Nebulizer Parameters: Calib Blank 1

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2347769.8	11086.06	0.47%	100.0	%
ScR 361.383	292119.7	12169.18	4.17%	100.0	%
Ag 328.068†	-153.5	13.56	8.83%	[0.00]	mg/L
Al 308.215†	198.0	5.26	2.66%	[0.00]	mg/L
As 188.979†	-10.6	2.99	28.10%	[0.00]	mg/L
B 249.677†	31.7	4.07	12.85%	[0.00]	mg/L

Ba 233.527†	26.6	2.39	8.98%	[0.00] mg/L
Be 313.042†	850.9	42.46	4.99%	[0.00] mg/L
Ca 317.933†	165.7	14.67	8.86%	[0.00] mg/L
Cd 228.802†	273.1	2.29	0.84%	[0.00] mg/L
Co 228.616†	-92.9	3.76	4.05%	[0.00] mg/L
Cr 267.716†	-124.5	6.21	4.99%	[0.00] mg/L
Cu 324.752†	2487.1	17.15	0.69%	[0.00] mg/L
Fe 273.955†	21.8	0.69	3.18%	[0.00] mg/L
K 766.490†	476.5	48.09	10.09%	[0.00] mg/L
Mg 279.077†	80.8	8.11	10.04%	[0.00] mg/L
Mn 257.610†	173.5	7.18	4.14%	[0.00] mg/L
Mo 202.031†	72.6	3.00	4.14%	[0.00] mg/L
Na 589.592†	-423.0	29.85	7.06%	[0.00] mg/L
Na 330.237†	-201.3	17.15	8.52%	[0.00] mg/L
Ni 231.604†	-12.9	2.34	18.13%	[0.00] mg/L
Pb 220.353†	55.1	1.06	1.92%	[0.00] mg/L
Sb 206.836†	73.8	6.29	8.51%	[0.00] mg/L
Se 196.026†	-44.7	3.27	7.30%	[0.00] mg/L
Si 288.158†	55.5	4.58	8.26%	[0.00] mg/L
Sn 189.927†	-0.1	3.62	>999.9%	[0.00] mg/L
Sr 421.552†	375.2	43.88	11.70%	[0.00] mg/L
Ti 334.903†	-58.2	19.58	33.64%	[0.00] mg/L
Tl 190.801†	-42.6	0.96	2.24%	[0.00] mg/L
V 292.402†	135.4	26.82	19.81%	[0.00] mg/L
Zn 206.200†	16.8	0.89	5.31%	[0.00] mg/L

==========

Sequence No.: 2
Sample ID: STD2

Autosampler Location: 2
Date Collected: 11/26/2012 11:18:48 AM
Data Type: Original

Nebulizer Parameters: STD2

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: STD2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2530864.9	103862.34	4.10%	107.8	%
ScR 361.383	309869.8	1489.46	0.48%	106.1	%
Ba 233.527†	39690.8	221.04	0.56%	[10]	mg/L
Cd 228.802†	249156.4	13307.11	5.34%	[10]	mg/L
Co 228.616†	325125.1	17508.76	5.39%	[10]	mg/L
Cr 267.716†	52762.2	191.61	0.36%	[10]	mg/L
Cu 324.752†	2211837.7	119775.77	5.42%	[10]	mg/L
Mn 257.610†	317813.7	625.57	0.20%	[10]	mg/L
V 292.402†	1079039.0	58497.32	5.42%	[10]	mg/L

==========

Sequence No.: 3
Sample ID: STD3

Autosampler Location: 3
Date Collected: 11/26/2012 11:20:33 AM
Data Type: Original

Nebulizer Parameters: STD3

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: STD3

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2404147.0	22923.17	0.95%	102.4	%
ScR 361.383	298140.8	7589.32	2.55%	102.1	%
Ag 328.068†	161430.0	1518.95	0.94%	[1.0]	mg/L
As 188.979†	16341.9	195.98	1.20%	[10]	mg/L
B 249.677†	67206.4	1611.81	2.40%	[10]	mg/L
Be 313.042†	2641518.7	94044.84	3.56%	[5.0]	mg/L
Na 589.592†	526596.8	18392.70	3.49%	[50]	mg/L
Ni 231.604†	36729.6	939.65	2.56%	[10]	mg/L

Pb 220.353†	74849.7	796.84	1.06%	[10] mg/L
Se 196.026†	13086.4	140.70	1.08%	[10] mg/L
Sr 421.552†	3795608.0	131811.95	3.47%	[5] mg/L
Tl 190.801†	22498.8	239.86	1.07%	[10] mg/L
Zn 206.200†	34035.6	880.52	2.59%	[10] mg/L

Sequence No.: 4
Sample ID: STD4

Autosampler Location: 4
Date Collected: 11/26/2012 11:22:50 AM
Data Type: Original

Nebulizer Parameters: STD4

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: STD4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2426619.0	12273.77	0.51%	103.4	%
ScR 361.383	308473.8	458.38	0.15%	105.6	%
Mo 202.031†	180470.2	1271.75	0.70%	[10]	mg/L
Sb 206.836†	29601.4	175.28	0.59%	[10]	mg/L
Si 288.158†	17593.4	79.18	0.45%	[10]	mg/L
Sn 189.927†	33831.9	136.08	0.40%	[10]	mg/L
Ti 334.903†	175209.5	375.38	0.21%	[10]	mg/L

Sequence No.: 5
Sample ID: STD5

Autosampler Location: 5
Date Collected: 11/26/2012 11:25:04 AM
Data Type: Original

Nebulizer Parameters: STD5

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: STD5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2265618.3	13946.89	0.62%	96.50	%
ScR 361.383	305404.2	592.74	0.19%	104.5	%
Al 308.215†	42278.4	184.90	0.44%	[30]	mg/L
Ca 317.933†	341146.2	1744.20	0.51%	[30]	mg/L
Fe 273.955†	117027.7	461.54	0.39%	[100]	mg/L
K 766.490†	164480.3	839.49	0.51%	[100]	mg/L
Mg 279.077†	34312.8	122.09	0.36%	[30]	mg/L
Na 330.237†	2502.9	18.14	0.72%	[100]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	161400	0.00000	1.000000	
Al 308.215	1	Lin Thru 0	0.0	1409	0.00000	1.000000	
As 188.979	1	Lin Thru 0	0.0	1634	0.00000	1.000000	
B 249.677	1	Lin Thru 0	0.0	6721	0.00000	1.000000	
Ba 233.527	1	Lin Thru 0	0.0	3969	0.00000	1.000000	
Be 313.042	1	Lin Thru 0	0.0	528300	0.00000	1.000000	
Ca 317.933	1	Lin Thru 0	0.0	11370	0.00000	1.000000	
Cd 228.802	1	Lin Thru 0	0.0	24920	0.00000	1.000000	
Co 228.616	1	Lin Thru 0	0.0	32510	0.00000	1.000000	
Cr 267.716	1	Lin Thru 0	0.0	5276	0.00000	1.000000	
Cu 324.752	1	Lin Thru 0	0.0	221200	0.00000	1.000000	
Fe 273.955	1	Lin Thru 0	0.0	1170	0.00000	1.000000	
K 766.490	1	Lin Thru 0	0.0	1645	0.00000	1.000000	
Mg 279.077	1	Lin Thru 0	0.0	1144	0.00000	1.000000	
Mn 257.610	1	Lin Thru 0	0.0	31780	0.00000	1.000000	
Mo 202.031	1	Lin Thru 0	0.0	18050	0.00000	1.000000	
Na 589.592	1	Lin Thru 0	0.0	10530	0.00000	1.000000	

Na 330.237	1	Lin Thru 0	0.0	25.03	0.00000	1.000000
Ni 231.604	1	Lin Thru 0	0.0	3673	0.00000	1.000000
Pb 220.353	1	Lin Thru 0	0.0	7485	0.00000	1.000000
Sb 206.836	1	Lin Thru 0	0.0	2960	0.00000	1.000000
Se 196.026	1	Lin Thru 0	0.0	1309	0.00000	1.000000
Si 288.158	1	Lin Thru 0	0.0	1759	0.00000	1.000000
Sn 189.927	1	Lin Thru 0	0.0	3383	0.00000	1.000000
Sr 421.552	1	Lin Thru 0	0.0	759100	0.00000	1.000000
Ti 334.903	1	Lin Thru 0	0.0	17520	0.00000	1.000000
Tl 190.801	1	Lin Thru 0	0.0	2250	0.00000	1.000000
V 292.402	1	Lin Thru 0	0.0	107900	0.00000	1.000000
Zn 206.200	1	Lin Thru 0	0.0	3404	0.00000	1.000000

Analysis Begun

Start Time: 11/26/2012 11:40:59 AM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 11/26/2012 8:17:31 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\CRISETMON.sif
Batch ID:
Results Data Set: I2121126
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: Calib Blank 1
Date Collected: 11/26/2012 11:41:00 AM
Data Type: Original

Nebulizer Parameters: Calib Blank 1

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: Calib Blank 1

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2385529.2	8370.78	0.35%	101.6	%
ScR 361.383	293229.1	8773.96	2.99%	100.4	%
Ag 328.068†	-131.5	27.33	20.78%	[0.00]	mg/L
Al 308.215†	192.4	9.48	4.93%	[0.00]	mg/L
As 188.979†	-15.7	1.21	7.69%	[0.00]	mg/L
B 249.677†	36.7	1.13	3.08%	[0.00]	mg/L
Ba 233.527†	25.0	3.53	14.10%	[0.00]	mg/L
Be 313.042†	875.9	34.04	3.89%	[0.00]	mg/L
Ca 317.933†	158.5	18.38	11.59%	[0.00]	mg/L
Cd 228.802†	271.7	3.19	1.17%	[0.00]	mg/L
Co 228.616†	-93.3	2.31	2.47%	[0.00]	mg/L
Cr 267.716†	-127.6	1.45	1.13%	[0.00]	mg/L
Cu 324.752†	2474.1	31.04	1.25%	[0.00]	mg/L
Fe 273.955†	21.9	2.35	10.74%	[0.00]	mg/L
K 766.490†	465.7	51.38	11.03%	[0.00]	mg/L
Mg 279.077†	74.7	3.51	4.69%	[0.00]	mg/L
Mn 257.610†	173.9	4.94	2.84%	[0.00]	mg/L
Mo 202.031†	76.6	1.96	2.56%	[0.00]	mg/L
Na 589.592†	-405.2	43.73	10.79%	[0.00]	mg/L
Na 330.237†	-200.8	16.90	8.41%	[0.00]	mg/L
Ni 231.604†	-22.3	3.80	17.04%	[0.00]	mg/L
Pb 220.353†	52.1	5.41	10.37%	[0.00]	mg/L
Sb 206.836†	70.5	4.64	6.58%	[0.00]	mg/L
Se 196.026†	-44.9	2.17	4.83%	[0.00]	mg/L
Si 288.158†	50.6	2.67	5.27%	[0.00]	mg/L
Sn 189.927†	-6.2	2.93	47.44%	[0.00]	mg/L
Sr 421.552†	327.1	40.91	12.51%	[0.00]	mg/L
Ti 334.903†	-64.8	12.04	18.58%	[0.00]	mg/L
Tl 190.801†	-43.6	3.14	7.19%	[0.00]	mg/L
V 292.402†	113.5	30.16	26.57%	[0.00]	mg/L
Zn 206.200†	14.2	2.41	16.95%	[0.00]	mg/L

Sequence No.: 2
Sample ID: STD2
Date Collected: 11/26/2012 11:44:55 AM
Data Type: Original

Nebulizer Parameters: STD2

Analyte	Back Pressure	Flow
All	214.0 kPa	0.75 L/min

Mean Data: STD2

Analyte	Mean Corrected	Calib

Analyte	Intensity	Std.Dev.	RSD	Conc.	Units
ScA 357.253	2476219.6	10662.05	0.43%	105.5	%
ScR 361.383	315044.5	20259.81	6.43%	107.8	%
Ba 233.527†	39774.5	2836.71	7.13%	[10]	mg/L
Cd 228.802†	258695.7	1067.88	0.41%	[10]	mg/L
Co 228.616†	337285.1	1647.51	0.49%	[10]	mg/L
Cr 267.716†	53142.5	3800.09	7.15%	[10]	mg/L
Cu 324.752†	2290740.0	7602.26	0.33%	[10]	mg/L
Mn 257.610†	320842.4	23143.56	7.21%	[10]	mg/L
V 292.402†	1117284.8	4603.96	0.41%	[10]	mg/L

Analysis Begun

Start Time: 11/26/2012 12:35:11 PM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 11/26/2012 8:17:31 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\CRISETMON.sif
Batch ID:
Results Data Set: I2121126
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: STD2
Date Collected: 11/26/2012 12:35:12 PM
Data Type: Original

Nebulizer Parameters: STD2

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: STD2

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2488817.5	16288.67	0.65%	106.0	%
ScR 361.383	299465.8	802.73	0.27%	102.5	%
Ba 233.527†	42427.4	71.23	0.17%	[10]	mg/L
Cd 228.802†	260300.9	303.66	0.12%	[10]	mg/L
Co 228.616†	341035.9	771.02	0.23%	[10]	mg/L
Cr 267.716†	56522.7	175.42	0.31%	[10]	mg/L
Cu 324.752†	2303115.8	4808.80	0.21%	[10]	mg/L
Mn 257.610†	341521.2	984.38	0.29%	[10]	mg/L
V 292.402†	1125550.3	1156.27	0.10%	[10]	mg/L

Analysis Begun

Start Time: 11/26/2012 12:38:53 PM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 11/26/2012 8:17:31 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\CRISETMON.sif
Batch ID:
Results Data Set: I2121126
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

Sequence No.: 1
Sample ID: ~~ICV~~ zzzzzz
Analyst: BA
Dilution: 1.000000X
BA 11/27/12
Autosampler Location: 7
Date Collected: 11/26/2012 12:38:54 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2386735.7	101.7	%	0.43				0.42%
ScR 361.383	291856.2	99.91	%	1.609				1.61%
Ag 328.068†	170589.9	1.057	mg/L	0.0051	1.057	mg/L	0.0051	0.48%
Al 308.215†	3134.6	2.189	mg/L	0.0451	2.189	mg/L	0.0451	2.06%
As 188.979†	3331.7	2.066	mg/L	0.0119	2.066	mg/L	0.0119	0.58%
B 249.677†	6951.5	1.033	mg/L	0.0236	1.033	mg/L	0.0236	2.29%
Ba 233.527†	4373.7	1.030	mg/L	0.0202	1.030	mg/L	0.0202	1.96%
Be 313.042†	538039.1	1.018	mg/L	0.0186	1.018	mg/L	0.0186	1.83%
Ca 317.933†	23829.8	2.096	mg/L	0.0379	2.096	mg/L	0.0379	1.81%
Cd 228.802†	27882.6	1.058	mg/L	0.0049	1.058	mg/L	0.0049	0.46%
Co 228.616†	35171.0	1.029	mg/L	0.0049	1.029	mg/L	0.0049	0.47%
Cr 267.716†	5823.3	1.030	mg/L	0.0207	1.030	mg/L	0.0207	2.01%
Cu 324.752†	245303.5	1.065	mg/L	0.0067	1.065	mg/L	0.0067	0.63%
Fe 273.955†	2605.4	2.219	mg/L	0.0369	2.219	mg/L	0.0369	1.66%
K 766.490†	35177.5	21.39	mg/L	0.435	21.39	mg/L	0.435	2.04%
Mg 279.077†	2516.8	2.208	mg/L	0.0394	2.208	mg/L	0.0394	1.79%
Mn 257.610†	33697.7	0.9871	mg/L	0.01829	0.9871	mg/L	0.01829	1.85%
Mo 202.031†	18746.6	1.039	mg/L	0.0070	1.039	mg/L	0.0070	0.68%
Na 589.592†	554347.7	52.63	mg/L	0.995	52.63	mg/L	0.995	1.89%
Na 330.237†	1404.1	56.00	mg/L	0.817	56.00	mg/L	0.817	1.46%
Ni 231.604†	3811.8	1.038	mg/L	0.0189	1.038	mg/L	0.0189	1.82%
Pb 220.353†	14878.0	1.989	mg/L	0.0140	1.989	mg/L	0.0140	0.70%
Sb 206.836†	6546.7	2.211	mg/L	0.0063	2.211	mg/L	0.0063	0.29%
Se 196.026†	2642.7	2.018	mg/L	0.0108	2.018	mg/L	0.0108	0.54%
Si 288.158†	4002.1	2.274	mg/L	0.0531	2.274	mg/L	0.0531	2.34%
Sn 189.927†	3583.3	1.061	mg/L	0.0060	1.061	mg/L	0.0060	0.56%
Sr 421.552†	789459.9	1.040	mg/L	0.0205	1.040	mg/L	0.0205	1.97%
Ti 334.903†	19303.0	1.101	mg/L	0.0198	1.101	mg/L	0.0198	1.80%
Tl 190.801†	4578.3	2.026	mg/L	0.0111	2.026	mg/L	0.0111	0.55%
V 292.402†	118366.9	1.056	mg/L	0.0040	1.056	mg/L	0.0040	0.38%
Zn 206.200†	3639.3	1.069	mg/L	0.0207	1.069	mg/L	0.0207	1.93%

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Analysis Begun

Start Time: 11/26/2012 12:48:55 PM
Logged In Analyst: Metals
Spectrometer: Optima 7300 DV, S/N 077C8121202
Plasma On Time: 11/26/2012 8:17:31 AM
Technique: ICP Continuous
Autosampler: ESI

Sample Information File: C:\pe\metals\Sample Information\CRISETMON.sif
Batch ID:
Results Data Set: I2121126
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

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Sequence No.: 1
Sample ID: STD4
Date Collected: 11/26/2012 12:48:56 PM
Data Type: Original

Nebulizer Parameters: STD4

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: STD4

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2437787.7	5970.81	0.24%	103.8	%
ScR 361.383	304982.2	8726.39	2.86%	104.4	%
Mo 202.031†	181280.3	811.04	0.45%	[10]	mg/L
Sb 206.836†	29682.2	92.93	0.31%	[10]	mg/L
Si 288.158†	18143.7	397.53	2.19%	[10]	mg/L
Sn 189.927†	34110.7	153.42	0.45%	[10]	mg/L
Ti 334.903†	179376.1	5898.01	3.29%	[10]	mg/L

Sequence No.: 2
Sample ID: STD5

Date Collected: 11/26/2012 12:50:56 PM
Data Type: Original

Nebulizer Parameters: STD5

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: STD5

Analyte	Mean Corrected Intensity	Std.Dev.	RSD	Conc.	Calib Units
ScA 357.253	2292570.9	9394.42	0.41%	97.65	%
ScR 361.383	294880.8	5114.68	1.73%	100.9	%
Al 308.215†	45143.6	745.52	1.65%	[30]	mg/L
Ca 317.933†	365449.2	6797.64	1.86%	[30]	mg/L
Fe 273.955†	126499.2	2404.96	1.90%	[100]	mg/L
K 766.490†	173748.8	3236.91	1.86%	[100]	mg/L
Mg 279.077†	36834.2	686.71	1.86%	[30]	mg/L
Na 330.237†	2645.5	55.26	2.09%	[100]	mg/L

Calibration Summary

Analyte	Stds.	Equation	Intercept	Slope	Curvature	Corr. Coef.	Reslope
Ag 328.068	1	Lin Thru 0	0.0	161400	0.00000	1.000000	
Al 308.215	1	Lin Thru 0	0.0	1505	0.00000	1.000000	
As 188.979	1	Lin Thru 0	0.0	1634	0.00000	1.000000	
B 249.677	1	Lin Thru 0	0.0	6721	0.00000	1.000000	
Ba 233.527	1	Lin Thru 0	0.0	4243	0.00000	1.000000	
Be 313.042	1	Lin Thru 0	0.0	528300	0.00000	1.000000	
Ca 317.933	1	Lin Thru 0	0.0	12180	0.00000	1.000000	
Cd 228.802	1	Lin Thru 0	0.0	26030	0.00000	1.000000	
Co 228.616	1	Lin Thru 0	0.0	34100	0.00000	1.000000	
Cr 267.716	1	Lin Thru 0	0.0	5652	0.00000	1.000000	
Cu 324.752	1	Lin Thru 0	0.0	230300	0.00000	1.000000	
Fe 273.955	1	Lin Thru 0	0.0	1265	0.00000	1.000000	
K 766.490	1	Lin Thru 0	0.0	1737	0.00000	1.000000	
Mg 279.077	1	Lin Thru 0	0.0	1228	0.00000	1.000000	
Mn 257.610	1	Lin Thru 0	0.0	34150	0.00000	1.000000	
Mo 202.031	1	Lin Thru 0	0.0	18130	0.00000	1.000000	
Na 589.592	1	Lin Thru 0	0.0	10530	0.00000	1.000000	
Na 330.237	1	Lin Thru 0	0.0	26.45	0.00000	1.000000	
Ni 231.604	1	Lin Thru 0	0.0	3673	0.00000	1.000000	
Pb 220.353	1	Lin Thru 0	0.0	7485	0.00000	1.000000	
Sb 206.836	1	Lin Thru 0	0.0	2968	0.00000	1.000000	
Se 196.026	1	Lin Thru 0	0.0	1309	0.00000	1.000000	
Si 288.158	1	Lin Thru 0	0.0	1814	0.00000	1.000000	
Sn 189.927	1	Lin Thru 0	0.0	3411	0.00000	1.000000	
Sr 421.552	1	Lin Thru 0	0.0	759100	0.00000	1.000000	
Ti 334.903	1	Lin Thru 0	0.0	17940	0.00000	1.000000	
Tl 190.801	1	Lin Thru 0	0.0	2250	0.00000	1.000000	
V 292.402	1	Lin Thru 0	0.0	112600	0.00000	1.000000	
Zn 206.200	1	Lin Thru 0	0.0	3404	0.00000	1.000000	

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Analysis Begun

Start Time: 11/26/2012 12:53:07 PM **Plasma On Time: 11/26/2012 8:17:31 AM**
Logged In Analyst: Metals **Technique: ICP Continuous**
Spectrometer: Optima 7300 DV, S/N 077C8121202 **Autosampler: ESI**

Sample Information File: C:\pe\metals\Sample Information\CRISETMON.sif
Batch ID:
Results Data Set: I2121126
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

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Sequence No.: 1 **Autosampler Location: 7**
Sample ID: ICV **Date Collected: 11/26/2012 12:53:08 PM**
Analyst: BA **Data Type: Original**
Dilution: 1.000000X

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2400881.2	102.3	%	0.36				0.35%
ScR 361.383	288632.6	98.81	%	1.073				1.09%
Ag 328.068†	168793.7	1.046	mg/L	0.0069	1.046	mg/L	0.0069	0.66%
Al 308.215†	3163.8	2.067	mg/L	0.0319	2.067	mg/L	0.0319	1.54%
As 188.979†	3311.2	2.053	mg/L	0.0121	2.053	mg/L	0.0121	0.59%
B 249.677†	7013.2	1.043	mg/L	0.0156	1.043	mg/L	0.0156	1.50%
Ba 233.527†	4396.2	1.036	mg/L	0.0148	1.036	mg/L	0.0148	1.43%
Be 313.042†	547744.2	1.037	mg/L	0.0076	1.037	mg/L	0.0076	0.74%
Ca 317.933†	24295.1	1.994	mg/L	0.0133	1.994	mg/L	0.0133	0.67%
Cd 228.802†	27575.1	1.047	mg/L	0.0077	1.047	mg/L	0.0077	0.73%
Co 228.616†	34814.8	1.019	mg/L	0.0079	1.019	mg/L	0.0079	0.77%
Cr 267.716†	5872.2	1.038	mg/L	0.0122	1.038	mg/L	0.0122	1.17%
Cu 324.752†	242706.5	1.053	mg/L	0.0081	1.053	mg/L	0.0081	0.76%
Fe 273.955†	2675.6	2.108	mg/L	0.0213	2.108	mg/L	0.0213	1.01%
K 766.490†	35557.6	20.46	mg/L	0.080	20.46	mg/L	0.080	0.39%
Mg 279.077†	2546.2	2.081	mg/L	0.0154	2.081	mg/L	0.0154	0.74%
Mn 257.610†	34334.8	1.006	mg/L	0.0087	1.006	mg/L	0.0087	0.87%
Mo 202.031†	18673.2	1.030	mg/L	0.0082	1.030	mg/L	0.0082	0.80%
Na 589.592†	562204.1	53.38	mg/L	0.419	53.38	mg/L	0.419	0.78%
Na 330.237†	1412.9	53.30	mg/L	0.665	53.30	mg/L	0.665	1.25%
Ni 231.604†	3838.9	1.046	mg/L	0.0142	1.046	mg/L	0.0142	1.36%
Pb 220.353†	14741.9	1.971	mg/L	0.0130	1.971	mg/L	0.0130	0.66%
Sb 206.836†	6484.5	2.184	mg/L	0.0141	2.184	mg/L	0.0141	0.65%
Se 196.026†	2616.7	1.998	mg/L	0.0145	1.998	mg/L	0.0145	0.73%
Si 288.158†	4051.9	2.232	mg/L	0.0366	2.232	mg/L	0.0366	1.64%
Sn 189.927†	3563.5	1.046	mg/L	0.0088	1.046	mg/L	0.0088	0.84%
Sr 421.552†	800206.1	1.054	mg/L	0.0078	1.054	mg/L	0.0078	0.74%
Ti 334.903†	19628.5	1.093	mg/L	0.0088	1.093	mg/L	0.0088	0.81%
Tl 190.801†	4539.5	2.009	mg/L	0.0128	2.009	mg/L	0.0128	0.64%
V 292.402†	116842.1	1.043	mg/L	0.0076	1.043	mg/L	0.0076	0.73%
Zn 206.200†	3681.2	1.081	mg/L	0.0132	1.081	mg/L	0.0132	1.22%

Sequence No.: 2
Sample ID: ICB
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 11/26/2012 12:57:11 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: ICB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2412652.1	102.8	%	0.23				0.22%
ScR 361.383	294635.8	100.9	%	0.64				0.63%
Ag 328.068†	15.2	0.00009	mg/L	0.000340	0.00009	mg/L	0.000340	360.42%
Al 308.215†	6.5	0.00430	mg/L	0.001153	0.00430	mg/L	0.001153	26.83%
As 188.979†	4.6	0.00282	mg/L	0.001299	0.00282	mg/L	0.001299	46.07%
B 249.677†	16.4	0.00244	mg/L	0.000491	0.00244	mg/L	0.000491	20.11%
Ba 233.527†	2.1	0.00050	mg/L	0.000856	0.00050	mg/L	0.000856	170.38%
Be 313.042†	92.1	0.00017	mg/L	0.000050	0.00017	mg/L	0.000050	28.73%
Ca 317.933†	15.4	0.00127	mg/L	0.000280	0.00127	mg/L	0.000280	22.11%
Cd 228.802†	2.0	0.00006	mg/L	0.000168	0.00006	mg/L	0.000168	278.01%
Co 228.616†	11.6	0.00034	mg/L	0.000095	0.00034	mg/L	0.000095	28.02%
Cr 267.716†	3.8	0.00068	mg/L	0.000229	0.00068	mg/L	0.000229	33.94%
Cu 324.752†	-7.0	-0.00003	mg/L	0.000110	-0.00003	mg/L	0.000110	358.64%
Fe 273.955†	4.9	0.00384	mg/L	0.001951	0.00384	mg/L	0.001951	50.83%
K 766.490†	32.2	0.01854	mg/L	0.018993	0.01854	mg/L	0.018993	102.46%
Mg 279.077†	5.7	0.00465	mg/L	0.003037	0.00465	mg/L	0.003037	65.37%
Mn 257.610†	6.3	0.00018	mg/L	0.000118	0.00018	mg/L	0.000118	63.71%
Mo 202.031†	29.8	0.00165	mg/L	0.000239	0.00165	mg/L	0.000239	14.52%
Na 589.592†	170.5	0.01619	mg/L	0.005006	0.01619	mg/L	0.005006	30.92%
Na 330.237†	-8.9	-0.3370	mg/L	0.26033	-0.3370	mg/L	0.26033	77.24%
Ni 231.604†	8.4	0.00228	mg/L	0.000277	0.00228	mg/L	0.000277	12.13%
Pb 220.353†	3.2	0.00044	mg/L	0.000553	0.00044	mg/L	0.000553	127.12%
Sb 206.836†	15.0	0.00504	mg/L	0.001236	0.00504	mg/L	0.001236	24.54%
Se 196.026†	2.4	0.00185	mg/L	0.002671	0.00185	mg/L	0.002671	144.70%
Si 288.158†	10.5	0.00579	mg/L	0.003907	0.00579	mg/L	0.003907	67.49%
Sn 189.927†	2.8	0.00082	mg/L	0.000634	0.00082	mg/L	0.000634	77.28%
Sr 421.552†	158.2	0.00021	mg/L	0.000039	0.00021	mg/L	0.000039	18.60%
Ti 334.903†	-5.2	-0.00029	mg/L	0.001449	-0.00029	mg/L	0.001449	495.81%
Tl 190.801†	3.6	0.00159	mg/L	0.001910	0.00159	mg/L	0.001910	119.98%
V 292.402†	25.0	0.00023	mg/L	0.000326	0.00023	mg/L	0.000326	144.03%
Zn 206.200†	1.3	0.00038	mg/L	0.000706	0.00038	mg/L	0.000706	187.75%

Sequence No.: 3
Sample ID: CRI
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 301
Date Collected: 11/26/2012 1:01:26 PM
Data Type: Original

Nebulizer Parameters: CRI

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CRI

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2459799.1	104.8	%	0.33				0.32%
ScR 361.383	296470.9	101.5	%	1.60				1.57%
Ag 328.068†	466.1	0.00289	mg/L	0.000239	0.00289	mg/L	0.000239	8.26%
Al 308.215†	79.2	0.05248	mg/L	0.004119	0.05248	mg/L	0.004119	7.85%
As 188.979†	81.2	0.04980	mg/L	0.002402	0.04980	mg/L	0.002402	4.82%
B 249.677†	141.1	0.02100	mg/L	0.000882	0.02100	mg/L	0.000882	4.20%
Ba 233.527†	12.6	0.00296	mg/L	0.001316	0.00296	mg/L	0.001316	44.50%
Be 313.042†	545.6	0.00103	mg/L	0.000049	0.00103	mg/L	0.000049	4.78%
Ca 317.933†	599.4	0.04920	mg/L	0.000786	0.04920	mg/L	0.000786	1.60%
Cd 228.802†	57.5	0.00189	mg/L	0.000114	0.00189	mg/L	0.000114	6.05%
Co 228.616†	130.2	0.00380	mg/L	0.000053	0.00380	mg/L	0.000053	1.40%
Cr 267.716†	28.1	0.00496	mg/L	0.000168	0.00496	mg/L	0.000168	3.39%
Cu 324.752†	361.5	0.00157	mg/L	0.000027	0.00157	mg/L	0.000027	1.69%
Fe 273.955†	65.1	0.05146	mg/L	0.000197	0.05146	mg/L	0.000197	0.38%
K 766.490†	894.6	0.5149	mg/L	0.02599	0.5149	mg/L	0.02599	5.05%
Mg 279.077†	62.8	0.05114	mg/L	0.000791	0.05114	mg/L	0.000791	1.55%
Mn 257.610†	40.0	0.00117	mg/L	0.000113	0.00117	mg/L	0.000113	9.62%
Mo 202.031†	95.1	0.00525	mg/L	0.000123	0.00525	mg/L	0.000123	2.35%
Na 589.592†	5289.7	0.5023	mg/L	0.00376	0.5023	mg/L	0.00376	0.75%
Na 330.237†	12.5	0.4701	mg/L	0.23986	0.4701	mg/L	0.23986	51.02%
Ni 231.604†	43.9	0.01196	mg/L	0.000931	0.01196	mg/L	0.000931	7.78%
Pb 220.353†	150.1	0.02007	mg/L	0.001072	0.02007	mg/L	0.001072	5.34%
Sb 206.836†	152.3	0.05136	mg/L	0.000841	0.05136	mg/L	0.000841	1.64%
Se 196.026†	61.3	0.04682	mg/L	0.004628	0.04682	mg/L	0.004628	9.88%
Si 288.158†	131.4	0.07240	mg/L	0.001679	0.07240	mg/L	0.001679	2.32%
Sn 189.927†	36.3	0.01068	mg/L	0.000763	0.01068	mg/L	0.000763	7.14%
Sr 421.552†	841.6	0.00111	mg/L	0.000036	0.00111	mg/L	0.000036	3.23%
Ti 334.903†	93.7	0.00522	mg/L	0.000918	0.00522	mg/L	0.000918	17.59%
Tl 190.801†	110.0	0.04888	mg/L	0.001828	0.04888	mg/L	0.001828	3.74%
V 292.402†	345.7	0.00309	mg/L	0.000085	0.00309	mg/L	0.000085	2.75%
Zn 206.200†	35.9	0.01054	mg/L	0.000157	0.01054	mg/L	0.000157	1.49%

Sequence No.: 4
Sample ID: ICSA
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 302
Date Collected: 11/26/2012 1:05:42 PM
Data Type: Original

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2440837.3	104.0	%	0.30				0.29%
ScR 361.383	295759.9	101.2	%	0.64				0.63%
Ag 328.068†	-159.2	-0.00098	mg/L	0.000197	-0.00098	mg/L	0.000197	20.01%
Al 308.215†	296229.9	196.9	mg/L	2.06	196.9	mg/L	2.06	1.05%
As 188.979†	36.4	0.01676	mg/L	0.004681	0.01676	mg/L	0.004681	27.92%
B 249.677†	-32.9	-0.00490	mg/L	0.001683	-0.00490	mg/L	0.001683	34.38%
Ba 233.527†	115.1	-0.00456	mg/L	0.000195	-0.00456	mg/L	0.000195	4.27%
Be 313.042†	52.3	0.00010	mg/L	0.000013	0.00010	mg/L	0.000013	13.21%
Ca 317.933†	1199669.3	98.48	mg/L	1.108	98.48	mg/L	1.108	1.13%
Cd 228.802†	45.1	-0.00026	mg/L	0.000250	-0.00026	mg/L	0.000250	97.68%
Co 228.616†	66.4	-0.00059	mg/L	0.000229	-0.00059	mg/L	0.000229	38.82%
Cr 267.716†	17.6	0.00103	mg/L	0.000444	0.00103	mg/L	0.000444	43.26%
Cu 324.752†	-1920.8	-0.00064	mg/L	0.000063	-0.00064	mg/L	0.000063	9.81%
Fe 273.955†	244834.1	193.5	mg/L	2.59	193.5	mg/L	2.59	1.34%
K 766.490†	11.2	0.00647	mg/L	0.010592	0.00647	mg/L	0.010592	163.60%
Mg 279.077†	125005.5	101.7	mg/L	1.31	101.7	mg/L	1.31	1.29%
Mn 257.610†	36.8	0.00104	mg/L	0.000240	0.00104	mg/L	0.000240	23.06%
Mo 202.031†	50.0	0.00170	mg/L	0.000371	0.00170	mg/L	0.000371	21.87%
Na 589.592†	201.7	0.01915	mg/L	0.004072	0.01915	mg/L	0.004072	21.26%
Na 330.237†	-6.5	-0.2453	mg/L	0.21591	-0.2453	mg/L	0.21591	88.00%
Ni 231.604†	4.6	0.00127	mg/L	0.001985	0.00127	mg/L	0.001985	155.95%
Pb 220.353†	-283.5	0.00127	mg/L	0.000877	0.00127	mg/L	0.000877	68.98%
Sb 206.836†	32.9	0.01091	mg/L	0.003469	0.01091	mg/L	0.003469	31.80%
Se 196.026†	14.4	0.01098	mg/L	0.004287	0.01098	mg/L	0.004287	39.03%
Si 288.158†	-22.0	0.00020	mg/L	0.003158	0.00020	mg/L	0.003158	>999.9%
Sn 189.927†	-69.3	-0.00814	mg/L	0.000487	-0.00814	mg/L	0.000487	5.98%
Sr 421.552†	3130.8	0.00412	mg/L	Conf. 0.000042	0.00412	mg/L	0.000042	1.02%
Ti 334.903†	146.4	0.00346	mg/L	0.000428	0.00346	mg/L	0.000428	12.36%
Tl 190.801†	-49.8	-0.00150	mg/L	0.001258	-0.00150	mg/L	0.001258	84.06%
V 292.402†	1138.0	0.00336	mg/L	0.000116	0.00336	mg/L	0.000116	3.44%
Zn 206.200†	8.6	0.00252	mg/L	0.000683	0.00252	mg/L	0.000683	27.13%

Sequence No.: 5
Sample ID: ICSAB
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 303
Date Collected: 11/26/2012 1:09:58 PM
Data Type: Original

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2440929.8	104.0	%	0.74				0.72%
ScR 361.383	296310.5	101.4	%	0.72				0.71%
Ag 328.068†	158664.8	0.9831	mg/L	0.00252	0.9831	mg/L	0.00252	0.26%
Al 308.215†	292151.4	194.1	mg/L	2.48	194.1	mg/L	2.48	1.28%
As 188.979†	1628.2	0.9902	mg/L	0.00498	0.9902	mg/L	0.00498	0.50%
B 249.677†	-27.8	-0.00613	mg/L	0.000512	-0.00613	mg/L	0.000512	8.36%
Ba 233.527†	4298.0	0.9816	mg/L	0.00673	0.9816	mg/L	0.00673	0.69%
Be 313.042†	528994.6	1.001	mg/L	0.0121	1.001	mg/L	0.0121	1.21%
Ca 317.933†	1186955.6	97.44	mg/L	1.229	97.44	mg/L	1.229	1.26%
Cd 228.802†	26256.0	1.001	mg/L	0.0031	1.001	mg/L	0.0031	0.31%
Co 228.616†	33093.7	0.9677	mg/L	0.00656	0.9677	mg/L	0.00656	0.68%
Cr 267.716†	5631.9	0.9942	mg/L	0.00897	0.9942	mg/L	0.00897	0.90%
Cu 324.752†	230436.8	1.008	mg/L	0.0027	1.008	mg/L	0.0027	0.26%
Fe 273.955†	242024.2	191.3	mg/L	2.57	191.3	mg/L	2.57	1.34%
K 766.490†	-83.3	-0.04795	mg/L	0.035068	-0.04795	mg/L	0.035068	73.14%
Mg 279.077†	119037.7	96.85	mg/L	1.323	96.85	mg/L	1.323	1.37%
Mn 257.610†	32301.9	0.9460	mg/L	0.01271	0.9460	mg/L	0.01271	1.34%
Mo 202.031†	52.4	0.00179	mg/L	0.000199	0.00179	mg/L	0.000199	11.15%
Na 589.592†	282.2	0.02679	mg/L	0.003725	0.02679	mg/L	0.003725	13.90%
Na 330.237†	4.2	-0.1591	mg/L	0.28574	-0.1591	mg/L	0.28574	179.61%
Ni 231.604†	3582.2	0.9755	mg/L	0.00985	0.9755	mg/L	0.00985	1.01%
Pb 220.353†	6759.5	0.9422	mg/L	0.00509	0.9422	mg/L	0.00509	0.54%
Sb 206.836†	3022.7	1.008	mg/L	0.0061	1.008	mg/L	0.0061	0.61%
Se 196.026†	1266.3	0.9666	mg/L	0.00743	0.9666	mg/L	0.00743	0.77%
Si 288.158†	-21.4	0.00356	mg/L	0.002638	0.00356	mg/L	0.002638	74.07%
Sn 189.927†	-68.3	-0.00749	mg/L	0.000878	-0.00749	mg/L	0.000878	11.73%
Sr 421.552†	3145.5	0.00414	mg/L Cont.	0.000085	0.00414	mg/L	0.000085	2.05%
Ti 334.903†	133.9	0.00261	mg/L	0.000089	0.00261	mg/L	0.000089	3.40%
Tl 190.801†	2026.1	0.9119	mg/L	0.00530	0.9119	mg/L	0.00530	0.58%
V 292.402†	107912.5	0.9565	mg/L	0.00211	0.9565	mg/L	0.00211	0.22%
Zn 206.200†	3289.5	0.9665	mg/L	0.00692	0.9665	mg/L	0.00692	0.72%

Sequence No.: 6
Sample ID: HiPurQC7M
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 304
Date Collected: 11/26/2012 1:15:09 PM
Data Type: Original

Nebulizer Parameters: HiPurQC7M

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: HiPurQC7M

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2493874.6	106.2	%	0.72				0.67%
ScR 361.383	303329.4	103.8	%	0.80				0.77%
Ag 328.068†	154679.2	0.9582	mg/L✔	0.00200	0.9582	mg/L	0.00200	0.21%
Al 308.215†	2914.1	1.937	mg/L✔	0.0253	1.937	mg/L	0.0253	1.31%
As 188.979†	2.5	0.00156	mg/L	0.001603	0.00156	mg/L	0.001603	103.03%
B 249.677†	13108.1	1.950	mg/L✔	0.0266	1.950	mg/L	0.0266	1.36%
Ba 233.527†	8223.7	1.938	mg/L✔	0.0232	1.938	mg/L	0.0232	1.20%
Be 313.042†	50.3	0.00010	mg/L	0.000013	0.00010	mg/L	0.000013	13.31%
Ca 317.933†	221.1	0.01815	mg/L	0.001446	0.01815	mg/L	0.001446	7.96%
Cd 228.802†	-1.6	-0.00007	mg/L	0.000138	-0.00007	mg/L	0.000138	195.94%
Co 228.616†	12.7	0.00022	mg/L	0.000023	0.00022	mg/L	0.000023	10.39%
Cr 267.716†	5.8	0.00102	mg/L	0.000757	0.00102	mg/L	0.000757	74.31%
Cu 324.752†	-105.5	-0.00046	mg/L	0.000082	-0.00046	mg/L	0.000082	17.89%
Fe 273.955†	34.2	0.02707	mg/L	0.004264	0.02707	mg/L	0.004264	15.75%
K 766.490†	33334.7	19.19	mg/L✔	0.197	19.19	mg/L	0.197	1.03%
Mg 279.077†	17.2	0.01401	mg/L	0.003185	0.01401	mg/L	0.003185	22.73%
Mn 257.610†	0.5	0.00000	mg/L	0.000115	0.00000	mg/L	0.000115	>999.9%
Mo 202.031†	-9.3	-0.00051	mg/L	0.000163	-0.00051	mg/L	0.000163	31.86%
Na 589.592†	20645.6	1.960	mg/L✔	0.0172	1.960	mg/L	0.0172	0.88%
Na 330.237†	42.8	1.619	mg/L	0.2105	1.619	mg/L	0.2105	13.00%
Ni 231.604†	7.4	0.00201	mg/L	0.000971	0.00201	mg/L	0.000971	48.31%
Pb 220.353†	0.8	0.00057	mg/L	0.000532	0.00057	mg/L	0.000532	93.31%
Sb 206.836†	2.8	0.00093	mg/L	0.002288	0.00093	mg/L	0.002288	247.28%
Se 196.026†	0.2	0.00015	mg/L	0.000902	0.00015	mg/L	0.000902	598.07%
Si 288.158†	3706.7	2.043	mg/L✔	0.0201	2.043	mg/L	0.0201	0.98%
Sn 189.927†	2.8	0.00083	mg/L	0.000614	0.00083	mg/L	0.000614	73.86%
Sr 421.552†	32.4	0.00004	mg/L	0.000016	0.00004	mg/L	0.000016	37.05%
Ti 334.903†	5.3	0.00029	mg/L	0.001275	0.00029	mg/L	0.001275	433.67%
Tl 190.801†	3.3	0.00144	mg/L	0.001033	0.00144	mg/L	0.001033	71.55%
V 292.402†	21.9	0.00020	mg/L	0.000193	0.00020	mg/L	0.000193	97.49%
Zn 206.200†	-1.0	-0.00030	mg/L	0.000445	-0.00030	mg/L	0.000445	150.49%

Sequence No.: 7
Sample ID: SPEXQC21
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 305
Date Collected: 11/26/2012 1:19:23 PM
Data Type: Original

Nebulizer Parameters: SPEXQC21

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: SPEXQC21

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2492046.4	106.1	%	0.34				0.32%
ScR 361.383	293523.4	100.5	%	0.63				0.63%
Ag 328.068†	-24.1	0.00043	mg/L	0.000328	0.00043	mg/L	0.000328	76.21%
Al 308.215†	136.4	0.02253	mg/L	0.004814	0.02253	mg/L	0.004814	21.37%
As 188.979†	3138.2	1.973	mg/L	0.0063	1.973	mg/L	0.0063	0.32%
B 249.677†	77.2	0.00971	mg/L	0.000629	0.00971	mg/L	0.000629	6.48%
Ba 233.527†	6.7	0.00095	mg/L	0.000418	0.00095	mg/L	0.000418	44.03%
Be 313.042†	1068711.9	2.022	mg/L	0.0104	2.022	mg/L	0.0104	0.51%
Ca 317.933†	24384.6	2.002	mg/L	0.0146	2.002	mg/L	0.0146	0.73%
Cd 228.802†	53365.1	2.039	mg/L	0.0118	2.039	mg/L	0.0118	0.58%
Co 228.616†	68737.5	2.011	mg/L	0.0123	2.011	mg/L	0.0123	0.61%
Cr 267.716†	11825.2	2.091	mg/L	0.0177	2.091	mg/L	0.0177	0.85%
Cu 324.752†	452183.1	1.963	mg/L	0.0018	1.963	mg/L	0.0018	0.09%
Fe 273.955†	2642.9	2.075	mg/L	0.0158	2.075	mg/L	0.0158	0.76%
K 766.490†	-23.8	-0.01371	mg/L	0.005377	-0.01371	mg/L	0.005377	39.22%
Mg 279.077†	2540.8	2.085	mg/L	0.0193	2.085	mg/L	0.0193	0.93%
Mn 257.610†	68552.0	2.008	mg/L	0.0116	2.008	mg/L	0.0116	0.58%
Mo 202.031†	35767.0	1.973	mg/L	0.0093	1.973	mg/L	0.0093	0.47%
Na 589.592†	345.4	0.03280	mg/L	0.003268	0.03280	mg/L	0.003268	9.96%
Na 330.237†	-15.7	-0.8000	mg/L	0.28056	-0.8000	mg/L	0.28056	35.07%
Ni 231.604†	7587.0	2.066	mg/L	0.0180	2.066	mg/L	0.0180	0.87%
Pb 220.353†	14398.7	1.925	mg/L	0.0094	1.925	mg/L	0.0094	0.49%
Sb 206.836†	6291.4	2.098	mg/L	0.0064	2.098	mg/L	0.0064	0.31%
Se 196.026†	2554.8	1.950	mg/L	0.0078	1.950	mg/L	0.0078	0.40%
Si 288.158†	65.6	0.04703	mg/L	0.007279	0.04703	mg/L	0.007279	15.48%
Sn 189.927†	-10.6	-0.00151	mg/L	0.000587	-0.00151	mg/L	0.000587	38.74%
Sr 421.552†	1570601.1	2.069	mg/L	0.0164	2.069	mg/L	0.0164	0.79%
Ti 334.903†	38204.3	2.128	mg/L	0.0118	2.128	mg/L	0.0118	0.55%
Tl 190.801†	4485.8	1.977	mg/L	0.0086	1.977	mg/L	0.0086	0.43%
V 292.402†	226220.1	2.019	mg/L	0.0116	2.019	mg/L	0.0116	0.57%
Zn 206.200†	7132.6	2.095	mg/L	0.0151	2.095	mg/L	0.0151	0.72%

Sequence No.: 8
Sample ID: DI CHECK
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 306
Date Collected: 11/26/2012 1:23:39 PM
Data Type: Original

Nebulizer Parameters: DI CHECK

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: DI CHECK

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2527297.5	107.6	%	1.00				0.93%
ScR 361.383	305917.3	104.7	%	1.58				1.51%
Ag 328.068†	28.0	0.00017	mg/L	0.000077	0.00017	mg/L	0.000077	44.18%
Al 308.215†	0.6	0.00038	mg/L	0.012781	0.00038	mg/L	0.012781	>999.9%
As 188.979†	3.9	0.00238	mg/L	0.002483	0.00238	mg/L	0.002483	104.32%
B 249.677†	-4.8	-0.00072	mg/L	0.000969	-0.00072	mg/L	0.000969	134.65%
Ba 233.527†	-1.8	-0.00042	mg/L	0.000941	-0.00042	mg/L	0.000941	226.42%
Be 313.042†	219.5	0.00042	mg/L	0.000152	0.00042	mg/L	0.000152	36.62%
Ca 317.933†	5.9	0.00048	mg/L	0.001485	0.00048	mg/L	0.001485	306.87%
Cd 228.802†	3.5	0.00012	mg/L	0.000125	0.00012	mg/L	0.000125	105.98%
Co 228.616†	22.5	0.00066	mg/L	0.000092	0.00066	mg/L	0.000092	13.93%
Cr 267.716†	8.4	0.00149	mg/L	0.000763	0.00149	mg/L	0.000763	51.26%
Cu 324.752†	-128.6	-0.00056	mg/L	0.000141	-0.00056	mg/L	0.000141	25.24%
Fe 273.955†	4.8	0.00377	mg/L	0.001739	0.00377	mg/L	0.001739	46.13%
K 766.490†	9.3	0.00536	mg/L	0.025631	0.00536	mg/L	0.025631	478.43%
Mg 279.077†	8.2	0.00672	mg/L	0.002335	0.00672	mg/L	0.002335	34.75%
Mn 257.610†	10.4	0.00030	mg/L	0.000099	0.00030	mg/L	0.000099	32.65%
Mo 202.031†	29.9	0.00165	mg/L	0.000131	0.00165	mg/L	0.000131	7.95%
Na 589.592†	1.7	0.00016	mg/L	0.004104	0.00016	mg/L	0.004104	>999.9%
Na 330.237†	-4.4	-0.1669	mg/L	0.43009	-0.1669	mg/L	0.43009	257.71%
Ni 231.604†	5.6	0.00153	mg/L	0.000331	0.00153	mg/L	0.000331	21.68%
Pb 220.353†	6.3	0.00084	mg/L	0.000497	0.00084	mg/L	0.000497	58.86%
Sb 206.836†	-3.6	-0.00124	mg/L	0.001027	-0.00124	mg/L	0.001027	83.03%
Se 196.026†	10.6	0.00811	mg/L	0.003042	0.00811	mg/L	0.003042	37.49%
Si 288.158†	-5.2	-0.00287	mg/L	0.003096	-0.00287	mg/L	0.003096	108.04%
Sn 189.927†	4.2	0.00125	mg/L	0.001043	0.00125	mg/L	0.001043	83.79%
Sr 421.552†	360.6	0.00048	mg/L	0.000137	0.00048	mg/L	0.000137	28.77%
Ti 334.903†	2.9	0.00016	mg/L	0.000701	0.00016	mg/L	0.000701	432.88%
Tl 190.801†	5.3	0.00236	mg/L	0.000438	0.00236	mg/L	0.000438	18.58%
V 292.402†	22.0	0.00020	mg/L	0.000173	0.00020	mg/L	0.000173	85.26%
Zn 206.200†	3.3	0.00097	mg/L	0.000974	0.00097	mg/L	0.000974	100.29%

Sequence No.: 9
Sample ID: CV
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 11/26/2012 1:27:53 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	221.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2393053.8	101.9	%	0.32				0.31%
ScR 361.383	297472.7	101.8	%	1.75				1.72%
Ag 328.068†	169942.3	1.053	mg/L	0.0049	1.053	mg/L	0.0049	0.46%
Al 308.215†	3075.2	2.008	mg/L	0.0493	2.008	mg/L	0.0493	2.45%
As 188.979†	3338.5	2.069	mg/L	0.0081	2.069	mg/L	0.0081	0.39%
B 249.677†	6837.4	1.016	mg/L	0.0233	1.016	mg/L	0.0233	2.30%
Ba 233.527†	4277.4	1.008	mg/L	0.0244	1.008	mg/L	0.0244	2.42%
Be 313.042†	538926.5	1.020	mg/L	0.0267	1.020	mg/L	0.0267	2.62%
Ca 317.933†	23546.4	1.933	mg/L	0.0449	1.933	mg/L	0.0449	2.32%
Cd 228.802†	27921.2	1.060	mg/L	0.0059	1.060	mg/L	0.0059	0.55%
Co 228.616†	35209.4	1.030	mg/L	0.0060	1.030	mg/L	0.0060	0.58%
Cr 267.716†	5734.6	1.014	mg/L	0.0219	1.014	mg/L	0.0219	2.16%
Cu 324.752†	244789.1	1.062	mg/L	0.0050	1.062	mg/L	0.0050	0.47%
Fe 273.955†	2586.6	2.037	mg/L	0.0456	2.037	mg/L	0.0456	2.24%
K 766.490†	34472.6	19.84	mg/L	0.329	19.84	mg/L	0.329	1.66%
Mg 279.077†	2470.0	2.019	mg/L	0.0468	2.019	mg/L	0.0468	2.32%
Mn 257.610†	33292.4	0.9752	mg/L	0.02149	0.9752	mg/L	0.02149	2.20%
Mo 202.031†	18833.7	1.039	mg/L	0.0043	1.039	mg/L	0.0043	0.42%
Na 589.592†	543442.3	51.60	mg/L	1.261	51.60	mg/L	1.261	2.44%
Na 330.237†	1392.8	52.54	mg/L	0.989	52.54	mg/L	0.989	1.88%
Ni 231.604†	3749.0	1.021	mg/L	0.0240	1.021	mg/L	0.0240	2.35%
Pb 220.353†	14974.8	2.002	mg/L	0.0084	2.002	mg/L	0.0084	0.42%
Sb 206.836†	6545.2	2.205	mg/L	0.0076	2.205	mg/L	0.0076	0.35%
Se 196.026†	2645.0	2.020	mg/L	0.0124	2.020	mg/L	0.0124	0.62%
Si 288.158†	3936.8	2.169	mg/L	0.0454	2.169	mg/L	0.0454	2.10%
Sn 189.927†	3591.4	1.054	mg/L	0.0070	1.054	mg/L	0.0070	0.67%
Sr 421.552†	773107.3	1.018	mg/L	0.0234	1.018	mg/L	0.0234	2.29%
Ti 334.903†	19069.3	1.062	mg/L	0.0262	1.062	mg/L	0.0262	2.46%
Tl 190.801†	4568.3	2.022	mg/L	0.0074	2.022	mg/L	0.0074	0.37%
V 292.402†	118228.6	1.055	mg/L	0.0066	1.055	mg/L	0.0066	0.63%
Zn 206.200†	3581.6	1.052	mg/L	0.0242	1.052	mg/L	0.0242	2.30%

Sequence No.: 10
Sample ID: CB
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 11/26/2012 1:31:55 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2410890.1	102.7	%	0.61				0.59%
ScR 361.383	293927.4	100.6	%	1.04				1.03%
Ag 328.068†	-19.2	-0.00012	mg/L	0.000109	-0.00012	mg/L	0.000109	91.37%
Al 308.215†	5.2	0.00340	mg/L	0.009952	0.00340	mg/L	0.009952	292.31%
As 188.979†	3.2	0.00202	mg/L	0.001839	0.00202	mg/L	0.001839	91.02%
B 249.677†	15.2	0.00227	mg/L	0.000457	0.00227	mg/L	0.000457	20.17%
Ba 233.527†	-0.5	-0.00013	mg/L	0.000681	-0.00013	mg/L	0.000681	540.31%
Be 313.042†	92.8	0.00018	mg/L	0.000033	0.00018	mg/L	0.000033	18.87%
Ca 317.933†	10.7	0.00088	mg/L	0.001922	0.00088	mg/L	0.001922	219.31%
Cd 228.802†	1.1	0.00003	mg/L	0.000090	0.00003	mg/L	0.000090	272.99%
Co 228.616†	13.3	0.00039	mg/L	0.000046	0.00039	mg/L	0.000046	11.90%
Cr 267.716†	3.0	0.00054	mg/L	0.000705	0.00054	mg/L	0.000705	131.67%
Cu 324.752†	-43.8	-0.00019	mg/L	0.000147	-0.00019	mg/L	0.000147	77.23%
Fe 273.955†	0.8	0.00064	mg/L	0.000444	0.00064	mg/L	0.000444	69.01%
K 766.490†	31.1	0.01792	mg/L	0.004737	0.01792	mg/L	0.004737	26.44%
Mg 279.077†	10.9	0.00892	mg/L	0.003320	0.00892	mg/L	0.003320	37.22%
Mn 257.610†	7.4	0.00022	mg/L	0.000104	0.00022	mg/L	0.000104	47.92%
Mo 202.031†	15.9	0.00088	mg/L	0.000239	0.00088	mg/L	0.000239	27.22%
Na 589.592†	127.6	0.01211	mg/L	0.003745	0.01211	mg/L	0.003745	30.91%
Na 330.237†	-8.4	-0.3181	mg/L	0.26448	-0.3181	mg/L	0.26448	83.14%
Ni 231.604†	9.4	0.00257	mg/L	0.001863	0.00257	mg/L	0.001863	72.40%
Pb 220.353†	1.1	0.00014	mg/L	0.000681	0.00014	mg/L	0.000681	475.17%
Sb 206.836†	9.0	0.00302	mg/L	0.000694	0.00302	mg/L	0.000694	22.97%
Se 196.026†	-4.5	-0.00347	mg/L	0.003409	-0.00347	mg/L	0.003409	98.09%
Si 288.158†	5.2	0.00288	mg/L	0.000802	0.00288	mg/L	0.000802	27.81%
Sn 189.927†	2.5	0.00072	mg/L	0.000599	0.00072	mg/L	0.000599	82.76%
Sr 421.552†	150.0	0.00020	mg/L	0.000045	0.00020	mg/L	0.000045	22.56%
Ti 334.903†	24.7	0.00138	mg/L	0.000682	0.00138	mg/L	0.000682	49.52%
Tl 190.801†	2.3	0.00102	mg/L	0.002337	0.00102	mg/L	0.002337	228.31%
V 292.402†	31.0	0.00028	mg/L	0.000080	0.00028	mg/L	0.000080	29.00%
Zn 206.200†	1.8	0.00054	mg/L	0.000485	0.00054	mg/L	0.000485	89.65%

Sequence No.: 11 **Autosampler Location: 307**
Sample ID: VS21 MB1 SWC **Date Collected: 11/26/2012 1:36:10 PM**
Analyst: BA **Data Type: Original**
Dilution: 2.000000X

Nebulizer Parameters: VS21 MB1 SWC

Analyte	Back Pressure	Flow
All	221.0 kPa	0.75 L/min

Mean Data: VS21 MB1 SWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2503882.8	106.6	%	0.65				0.61%
ScR 361.383	306914.1	105.1	%	0.72				0.69%
Ag 328.068†	-8.9	-0.00005	mg/L	0.000227	-0.00011	mg/L	0.000455	414.20%
Al 308.215†	15.8	0.01048	mg/L	0.002001	0.02097	mg/L	0.004003	19.09%
As 188.979†	4.6	0.00280	mg/L	0.001771	0.00559	mg/L	0.003543	63.35%
B 249.677†	2.6	0.00038	mg/L	0.000897	0.00077	mg/L	0.001794	234.04%
Ba 233.527†	0.6	0.00014	mg/L	0.000338	0.00028	mg/L	0.000677	245.57%
Be 313.042†	-11.6	-0.00002	mg/L	0.000025	-0.00004	mg/L	0.000050	113.94%
Ca 317.933†	130.0	0.01067	mg/L	0.000384	0.02135	mg/L	0.000767	3.59%
Cd 228.802†	-0.2	-0.00003	mg/L	0.000186	-0.00005	mg/L	0.000371	726.54%
Co 228.616†	5.6	0.00016	mg/L	0.000116	0.00033	mg/L	0.000232	71.22%
Cr 267.716†	9.3	0.00165	mg/L	0.000839	0.00331	mg/L	0.001678	50.75%
Cu 324.752†	-88.6	-0.00038	mg/L	0.000105	-0.00077	mg/L	0.000209	27.21%
Fe 273.955†	4.4	0.00348	mg/L	0.000805	0.00695	mg/L	0.001609	23.14%
K 766.490†	25.4	0.01459	mg/L	0.008273	0.02919	mg/L	0.016546	56.69%
Mg 279.077†	2.7	0.00219	mg/L	0.003028	0.00438	mg/L	0.006055	138.10%
Mn 257.610†	5.5	0.00016	mg/L	0.000085	0.00032	mg/L	0.000170	52.77%
Mo 202.031†	-7.1	-0.00039	mg/L	0.000302	-0.00078	mg/L	0.000604	77.44%
Na 589.592†	70.0	0.00664	mg/L	0.003156	0.01329	mg/L	0.006313	47.51%
Na 330.237†	1.1	0.04050	mg/L	0.144835	0.08099	mg/L	0.289670	357.66%
Ni 231.604†	3.5	0.00094	mg/L	0.000777	0.00189	mg/L	0.001554	82.24%
Pb 220.353†	6.7	0.00090	mg/L	0.000743	0.00181	mg/L	0.001487	82.18%
Sb 206.836†	1.6	0.00053	mg/L	0.001506	0.00107	mg/L	0.003012	281.62%
Se 196.026†	-1.4	-0.00105	mg/L	0.002205	-0.00209	mg/L	0.004411	210.55%
Si 288.158†	7.5	0.00411	mg/L	0.002798	0.00823	mg/L	0.005595	68.01%
Sn 189.927†	3.8	0.00111	mg/L	0.000815	0.00222	mg/L	0.001631	73.46%
Sr 421.552†	10.7	0.00001	mg/L	0.000019	0.00003	mg/L	0.000039	136.44%
Ti 334.903†	2.1	0.00012	mg/L	0.000345	0.00023	mg/L	0.000690	298.74%
Tl 190.801†	1.7	0.00077	mg/L	0.001215	0.00155	mg/L	0.002429	157.03%
V 292.402†	19.9	0.00018	mg/L	0.000149	0.00037	mg/L	0.000299	81.19%
Zn 206.200†	10.1	0.00296	mg/L	0.000455	0.00591	mg/L	0.000910	15.38%

Sequence No.: 12
Sample ID: VS20 E SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 308
Date Collected: 11/26/2012 1:40:27 PM
Data Type: Original

Nebulizer Parameters: VS20 E SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS20 E SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2459457.6	104.8	%	0.40				0.38%
ScR 361.383	305676.4	104.6	%	1.42				1.36%
Ag 328.068†	428.6	0.00269	mg/L	0.000173	0.01343	mg/L	0.000864	6.43%
Al 308.215†	128209.6	85.20	mg/L	2.182	426.0	mg/L	10.91	2.56%
As 188.979†	75.2	0.09903	mg/L	0.001392	0.4951	mg/L	0.00696	1.41%
B 249.677†	59.9	0.00866	mg/L	0.001226	0.04328	mg/L	0.006131	14.17%
Ba 233.527†	4718.8	1.085	mg/L	0.0243	5.427	mg/L	0.1216	2.24%
Be 313.042†	2822.8	0.00530	mg/L	0.000148	0.02649	mg/L	0.000738	2.78%
Ca 317.933†	612347.9	50.27	mg/L	1.327	251.3	mg/L	6.64	2.64%
Cd 228.802†	1081.1	0.03986	mg/L	0.000351	0.1993	mg/L	0.00176	0.88%
Co 228.616†	4370.9	0.1221	mg/L	0.00067	0.6107	mg/L	0.00335	0.55%
Cr 267.716†	428.5	0.07681	mg/L	0.000369	0.3840	mg/L	0.00185	0.48%
Cu 324.752†	47131.8	0.2112	mg/L	0.00089	1.056	mg/L	0.0045	0.42%
Fe 273.955†	207588.8	164.1	mg/L	4.30	820.5	mg/L	21.52	2.62%
K 766.490†	7832.6	4.508	mg/L	0.1259	22.54	mg/L	0.630	2.79%
Mg 279.077†	51632.3	41.97	mg/L	1.173	209.8	mg/L	5.87	2.80%
Mn 257.610†	483526.6	14.16	mg/L	0.363	70.79	mg/L	1.815	2.56%
Mo 202.031†	121.3	0.00615	mg/L	0.000347	0.03073	mg/L	0.001735	5.64%
Na 589.592†	5961.0	0.5660	mg/L	0.01100	2.830	mg/L	0.0550	1.94%
Na 330.237†	14.0	0.2423	mg/L	0.09151	1.212	mg/L	0.4575	37.76%
Ni 231.604†	815.1	0.2219	mg/L	0.00418	1.110	mg/L	0.0209	1.88%
Pb 220.353†	11872.7	1.600	mg/L	0.0050	7.999	mg/L	0.0249	0.31%
Sb 206.836†	47.2	0.01600	mg/L	0.003584	0.08002	mg/L	0.017920	22.40%
Se 196.026†	14.8	0.01121	mg/L	0.002876	0.05606	mg/L	0.014382	25.66%
Si 288.158†	978.6	0.5446	mg/L	0.01221	2.723	mg/L	0.0611	2.24%
Sn 189.927†	-34.2	-0.00346	mg/L	0.001713	-0.01728	mg/L	0.008566	49.57%
Sr 421.552†	302241.1	0.3981	mg/L	0.01026	1.991	mg/L	0.0513	2.58%
Ti 334.903†	35059.7	1.952	mg/L	0.0505	9.761	mg/L	0.2524	2.59%
Tl 190.801†	-33.1	0.00172	mg/L	0.004841	0.00862	mg/L	0.024203	280.78%
V 292.402†	11954.3	0.1019	mg/L	0.00031	0.5093	mg/L	0.00154	0.30%
Zn 206.200†	7548.5	2.218	mg/L	0.0517	11.09	mg/L	0.258	2.33%

Sequence No.: 13
Sample ID: VS21 B SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 309
Date Collected: 11/26/2012 1:44:28 PM
Data Type: Original

Nebulizer Parameters: VS21 B SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS21 B SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2430555.1	103.5	%	0.13				0.12%
ScR 361.383	305755.5	104.7	%	2.44				2.33%
Ag 328.068†	965.8	0.00600	mg/L	0.000162	0.02999	mg/L	0.000808	2.69%
Al 308.215†	38524.6	25.60	mg/L	0.632	128.0	mg/L	3.16	2.47%
As 188.979†	81.0	0.09358	mg/L	0.001826	0.4679	mg/L	0.00913	1.95%
B 249.677†	147.9	0.02197	mg/L	0.000651	0.1099	mg/L	0.00326	2.96%
Ba 233.527†	13728.0	3.230	mg/L	0.0720	16.15	mg/L	0.360	2.23%
Be 313.042†	844.1	0.00157	mg/L	0.000086	0.00784	mg/L	0.000432	5.51%
Ca 317.933†	544962.5	44.74	mg/L	1.119	223.7	mg/L	5.59	2.50%
Cd 228.802†	1970.4	0.07507	mg/L	0.000458	0.3753	mg/L	0.00229	0.61%
Co 228.616†	648.2	0.01516	mg/L	0.000427	0.07579	mg/L	0.002133	2.81%
Cr 267.716†	173.5	0.03035	mg/L	0.001645	0.1518	mg/L	0.00823	5.42%
Cu 324.752†	39001.5	0.1704	mg/L	0.00162	0.8522	mg/L	0.00810	0.95%
Fe 273.955†	42633.9	33.70	mg/L	0.822	168.5	mg/L	4.11	2.44%
K 766.490†	7691.7	4.427	mg/L	0.0937	22.13	mg/L	0.468	2.12%
Mg 279.077†	8882.7	7.217	mg/L	0.1590	36.08	mg/L	0.795	2.20%
Mn 257.610†	183975.0	5.388	mg/L	0.1364	26.94	mg/L	0.682	2.53%
Mo 202.031†	93.5	0.00467	mg/L	0.000424	0.02335	mg/L	0.002119	9.07%
Na 589.592†	3892.9	0.3696	mg/L	0.00569	1.848	mg/L	0.0284	1.54%
Na 330.237†	23.5	-0.04649	mg/L	0.125481	-0.2325	mg/L	0.62740	269.89%
Ni 231.604†	91.4	0.02497	mg/L	0.000214	0.1249	mg/L	0.00107	0.86%
Pb 220.353†	43601.4	5.830	mg/L	0.0715	29.15	mg/L	0.357	1.23%
Sb 206.836†	434.5	0.1471	mg/L	0.00141	0.7355	mg/L	0.00706	0.96%
Se 196.026†	-0.7	-0.00056	mg/L	0.002193	-0.00281	mg/L	0.010966	390.92%
Si 288.158†	4496.2	2.479	mg/L	0.0605	12.40	mg/L	0.302	2.44%
Sn 189.927†	94.6	0.03376	mg/L	0.000867	0.1688	mg/L	0.00433	2.57%
Sr 421.552†	411859.5	0.5425	mg/L	0.01333	2.713	mg/L	0.0667	2.46%
Ti 334.903†	29250.3	1.629	mg/L	0.0416	8.143	mg/L	0.2079	2.55%
Tl 190.801†	10.2	0.00786	mg/L	0.002302	0.03928	mg/L	0.011512	29.31%
V 292.402†	5643.5	0.04900	mg/L	0.000431	0.2450	mg/L	0.00215	0.88%
Zn 206.200†	13491.6	3.964	mg/L	0.0861	19.82	mg/L	0.431	2.17%

Sequence No.: 14
Sample ID: VS21 C SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 310
Date Collected: 11/26/2012 1:48:28 PM
Data Type: Original

Nebulizer Parameters: VS21 C SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS21 C SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2459353.5	104.8	%	0.47				0.44%
ScR 361.383	308913.1	105.7	%	1.69				1.60%
Ag 328.068†	-24.3	-0.00010	mg/L	0.000095	-0.00049	mg/L	0.000475	96.87%
Al 308.215†	119818.0	79.61	mg/L	1.559	398.1	mg/L	7.79	1.96%
As 188.979†	-14.1	0.08496	mg/L	0.002004	0.4248	mg/L	0.01002	2.36%
B 249.677†	44.6	0.00654	mg/L	0.000390	0.03271	mg/L	0.001952	5.97%
Ba 233.527†	5004.9	1.164	mg/L	0.0197	5.821	mg/L	0.0984	1.69%
Be 313.042†	1056.7	0.00192	mg/L	0.000059	0.00962	mg/L	0.000297	3.08%
Ca 317.933†	212198.2	17.42	mg/L	0.362	87.10	mg/L	1.808	2.08%
Cd 228.802†	523.0	0.01932	mg/L	0.000296	0.09659	mg/L	0.001481	1.53%
Co 228.616†	1639.2	0.04034	mg/L	0.000688	0.2017	mg/L	0.00344	1.71%
Cr 267.716†	591.4	0.1058	mg/L	0.00299	0.5290	mg/L	0.01493	2.82%
Cu 324.752†	23586.9	0.1057	mg/L	0.00098	0.5285	mg/L	0.00489	0.92%
Fe 273.955†	118827.9	93.93	mg/L	1.722	469.7	mg/L	8.61	1.83%
K 766.490†	14620.8	8.415	mg/L	0.1156	42.07	mg/L	0.578	1.37%
Mg 279.077†	28098.3	22.84	mg/L	0.484	114.2	mg/L	2.42	2.12%
Mn 257.610†	104432.6	3.058	mg/L	0.0587	15.29	mg/L	0.294	1.92%
Mo 202.031†	49.3	0.00253	mg/L	0.000505	0.01264	mg/L	0.002527	19.99%
Na 589.592†	12571.9	1.194	mg/L	0.0240	5.968	mg/L	0.1201	2.01%
Na 330.237†	19.3	1.119	mg/L	0.1145	5.593	mg/L	0.5725	10.24%
Ni 231.604†	309.8	0.08437	mg/L	0.001304	0.4218	mg/L	0.00652	1.55%
Pb 220.353†	5284.1	0.7212	mg/L	0.00481	3.606	mg/L	0.0241	0.67%
Sb 206.836†	25.8	0.00931	mg/L	0.001705	0.04656	mg/L	0.008525	18.31%
Se 196.026†	8.9	0.00670	mg/L	0.003326	0.03350	mg/L	0.016631	49.64%
Si 288.158†	5718.5	3.155	mg/L	0.0529	15.77	mg/L	0.264	1.68%
Sn 189.927†	-15.2	-0.00179	mg/L	0.001435	-0.00895	mg/L	0.007174	80.20%
Sr 421.552†	163073.1	0.2148	mg/L	0.00398	1.074	mg/L	0.0199	1.85%
Ti 334.903†	59362.3	3.309	mg/L	0.0649	16.54	mg/L	0.325	1.96%
Tl 190.801†	-23.7	-0.00140	mg/L	0.002110	-0.00701	mg/L	0.010550	150.51%
V 292.402†	20599.1	0.1788	mg/L	0.00182	0.8939	mg/L	0.00908	1.02%
Zn 206.200†	3768.2	1.107	mg/L	0.0240	5.536	mg/L	0.1201	2.17%

Sequence No.: 15
Sample ID: VS21 A-L SWC
Analyst: BA
Dilution: 25.000000X

Autosampler Location: 311
Date Collected: 11/26/2012 1:52:28 PM
Data Type: Original

Nebulizer Parameters: VS21 A-L SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS21 A-L SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2405663.5	102.5	%	0.37				0.36%
ScR 361.383	305081.8	104.4	%	3.63				3.47%
Ag 328.068†	-4.8	-0.00002	mg/L	0.000148	-0.00043	mg/L	0.003690	861.82%
Al 308.215†	26128.9	17.36	mg/L	0.574	434.0	mg/L	14.35	3.31%
As 188.979†	-4.5	0.01905	mg/L	0.001512	0.4763	mg/L	0.03781	7.94%
B 249.677†	0.5	0.00006	mg/L	0.000191	0.00153	mg/L	0.004780	311.41%
Ba 233.527†	676.8	0.1563	mg/L	0.00561	3.908	mg/L	0.1403	3.59%
Be 313.042†	264.7	0.00048	mg/L	0.000069	0.01208	mg/L	0.001728	14.31%
Ca 317.933†	37084.8	3.044	mg/L	0.0967	76.11	mg/L	2.417	3.18%
Cd 228.802†	150.1	0.00561	mg/L	0.000135	0.1403	mg/L	0.00337	2.40%
Co 228.616†	321.7	0.00768	mg/L	0.000320	0.1920	mg/L	0.00801	4.17%
Cr 267.716†	160.0	0.02849	mg/L	0.000775	0.7122	mg/L	0.01936	2.72%
Cu 324.752†	5689.7	0.02536	mg/L	0.000567	0.6341	mg/L	0.01419	2.24%
Fe 273.955†	24661.8	19.50	mg/L	0.622	487.4	mg/L	15.54	3.19%
K 766.490†	1807.0	1.040	mg/L	0.0572	26.00	mg/L	1.429	5.50%
Mg 279.077†	6771.0	5.504	mg/L	0.1626	137.6	mg/L	4.06	2.95%
Mn 257.610†	18772.4	0.5498	mg/L	0.01758	13.74	mg/L	0.439	3.20%
Mo 202.031†	6.8	0.00034	mg/L	0.000256	0.00858	mg/L	0.006409	74.68%
Na 589.592†	825.8	0.07841	mg/L	0.002174	1.960	mg/L	0.0544	2.77%
Na 330.237†	-4.5	-0.07037	mg/L	0.129283	-1.759	mg/L	3.2321	183.73%
Ni 231.604†	67.3	0.01833	mg/L	0.000732	0.4582	mg/L	0.01831	3.99%
Pb 220.353†	3073.9	0.4140	mg/L	0.00972	10.35	mg/L	0.243	2.35%
Sb 206.836†	10.1	0.00351	mg/L	0.004029	0.08763	mg/L	0.100732	114.95%
Se 196.026†	-0.9	-0.00069	mg/L	0.003094	-0.01736	mg/L	0.077349	445.44%
Si 288.158†	1237.6	0.6828	mg/L	0.01579	17.07	mg/L	0.395	2.31%
Sn 189.927†	-0.5	0.00034	mg/L	0.000749	0.00856	mg/L	0.018733	218.76%
Sr 421.552†	25211.5	0.03321	mg/L	0.001127	0.8303	mg/L	0.02818	3.39%
Ti 334.903†	13805.7	0.7695	mg/L	0.02321	19.24	mg/L	0.580	3.02%
Tl 190.801†	-4.5	-0.00015	mg/L	0.000965	-0.00368	mg/L	0.024128	655.22%
V 292.402†	4953.5	0.04310	mg/L	0.001331	1.077	mg/L	0.0333	3.09%
Zn 206.200†	785.1	0.2307	mg/L	0.00729	5.767	mg/L	0.1821	3.16%

Sequence No.: 16
Sample ID: VS21 A SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 312
Date Collected: 11/26/2012 1:56:27 PM
Data Type: Original

Nebulizer Parameters: VS21 A SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS21 A SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	Sample RSD
ScA 357.253	2424637.8	103.3	%	0.79				0.77%
ScR 361.383	305156.8	104.5	%	2.75				2.63%
Ag 328.068†	-35.6	-0.00016	mg/L	0.000251	-0.00078	mg/L	0.001255	160.23%
Al 308.215†	131399.7	87.31	mg/L	3.060	436.5	mg/L	15.30	3.50%
As 188.979†	-23.5	0.09437	mg/L	0.003312	0.4718	mg/L	0.01656	3.51%
B 249.677†	19.8	0.00285	mg/L	0.000468	0.01423	mg/L	0.002342	16.46%
Ba 233.527†	3392.5	0.7835	mg/L	0.01831	3.918	mg/L	0.0916	2.34%
Be 313.042†	1362.2	0.00249	mg/L	0.000092	0.01244	mg/L	0.000459	3.69%
Ca 317.933†	187494.5	15.39	mg/L	0.541	76.96	mg/L	2.705	3.52%
Cd 228.802†	775.5	0.02902	mg/L	0.001052	0.1451	mg/L	0.00526	3.63%
Co 228.616†	1628.5	0.03899	mg/L	0.001334	0.1949	mg/L	0.00667	3.42%
Cr 267.716†	766.6	0.1367	mg/L	0.00377	0.6836	mg/L	0.01883	2.76%
Cu 324.752†	29478.6	0.1313	mg/L	0.00386	0.6566	mg/L	0.01930	2.94%
Fe 273.955†	123713.9	97.80	mg/L	3.605	489.0	mg/L	18.03	3.69%
K 766.490†	9217.0	5.305	mg/L	0.1658	26.52	mg/L	0.829	3.13%
Mg 279.077†	32112.0	26.10	mg/L	0.898	130.5	mg/L	4.49	3.44%
Mn 257.610†	94029.5	2.754	mg/L	0.0972	13.77	mg/L	0.486	3.53%
Mo 202.031†	56.2	0.00292	mg/L	0.000548	0.01462	mg/L	0.002742	18.75%
Na 589.592†	4144.3	0.3935	mg/L	0.01428	1.967	mg/L	0.0714	3.63%
Na 330.237†	-5.4	0.2871	mg/L	0.17888	1.435	mg/L	0.8944	62.31%
Ni 231.604†	326.5	0.08889	mg/L	0.001246	0.4445	mg/L	0.00623	1.40%
Pb 220.353†	15295.7	2.060	mg/L	0.0495	10.30	mg/L	0.248	2.40%
Sb 206.836†	40.7	0.01429	mg/L	0.001857	0.07147	mg/L	0.009286	12.99%
Se 196.026†	6.1	0.00449	mg/L	0.002706	0.02246	mg/L	0.013528	60.24%
Si 288.158†	6171.3	3.405	mg/L	0.0908	17.02	mg/L	0.454	2.67%
Sn 189.927†	-0.7	0.00234	mg/L	0.001083	0.01168	mg/L	0.005414	46.37%
Sr 421.552†	125237.0	0.1650	mg/L	0.00573	0.8249	mg/L	0.02863	3.47%
Ti 334.903†	68804.7	3.835	mg/L	0.1316	19.18	mg/L	0.658	3.43%
Tl 190.801†	-15.9	0.00230	mg/L	0.001837	0.01149	mg/L	0.009183	79.95%
V 292.402†	25059.5	0.2181	mg/L	0.00656	1.090	mg/L	0.0328	3.01%
Zn 206.200†	3944.6	1.159	mg/L	0.0286	5.795	mg/L	0.1429	2.47%

Sequence No.: 17
Sample ID: VS21 ADUP SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 313
Date Collected: 11/26/2012 2:00:27 PM
Data Type: Original

Nebulizer Parameters: VS21 ADUP SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS21 ADUP SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2427197.7	103.4	%	0.22				0.22%
ScR 361.383	307318.2	105.2	%	3.47				3.30%
Ag 328.068†	-30.2	-0.00012	mg/L	0.000183	-0.00062	mg/L	0.000915	147.99%
Al 308.215†	130586.1	86.77	mg/L	3.265	433.8	mg/L	16.32	3.76%
As 188.979†	-36.5	0.08568	mg/L	0.004387	0.4284	mg/L	0.02194	5.12%
B 249.677†	15.1	0.00216	mg/L	0.000789	0.01078	mg/L	0.003944	36.59%
Ba 233.527†	3417.5	0.7900	mg/L	0.02272	3.950	mg/L	0.1136	2.88%
Be 313.042†	1370.8	0.00251	mg/L	0.000128	0.01253	mg/L	0.000642	5.12%
Ca 317.933†	176300.0	14.47	mg/L	0.543	72.36	mg/L	2.713	3.75%
Cd 228.802†	752.3	0.02821	mg/L	0.000577	0.1411	mg/L	0.00288	2.04%
Co 228.616†	1641.2	0.03946	mg/L	0.000786	0.1973	mg/L	0.00393	1.99%
Cr 267.716†	797.0	0.1420	mg/L	0.00316	0.7102	mg/L	0.01579	2.22%
Cu 324.752†	29422.6	0.1309	mg/L	0.00170	0.6547	mg/L	0.00852	1.30%
Fe 273.955†	119595.3	94.54	mg/L	3.541	472.7	mg/L	17.70	3.75%
K 766.490†	9370.5	5.393	mg/L	0.2306	26.97	mg/L	1.153	4.28%
Mg 279.077†	31089.9	25.27	mg/L	0.907	126.4	mg/L	4.53	3.59%
Mn 257.610†	94010.5	2.753	mg/L	0.1042	13.77	mg/L	0.521	3.79%
Mo 202.031†	57.3	0.00300	mg/L	0.000479	0.01498	mg/L	0.002397	16.00%
Na 589.592†	3903.9	0.3707	mg/L	0.01347	1.853	mg/L	0.0674	3.63%
Na 330.237†	-11.1	0.07585	mg/L	0.330889	0.3793	mg/L	1.65445	436.23%
Ni 231.604†	321.1	0.08743	mg/L	0.001947	0.4371	mg/L	0.00974	2.23%
Pb 220.353†	14936.8	2.013	mg/L	0.0241	10.06	mg/L	0.121	1.20%
Sb 206.836†	43.6	0.01518	mg/L	0.001972	0.07590	mg/L	0.009862	12.99%
Se 196.026†	9.3	0.00699	mg/L	0.005256	0.03495	mg/L	0.026282	75.21%
Si 288.158†	6190.9	3.415	mg/L	0.0975	17.08	mg/L	0.487	2.85%
Sn 189.927†	2.9	0.00326	mg/L	0.000340	0.01631	mg/L	0.001702	10.43%
Sr 421.552†	121094.5	0.1595	mg/L	0.00584	0.7976	mg/L	0.02918	3.66%
Ti 334.903†	68321.8	3.808	mg/L	0.1402	19.04	mg/L	0.701	3.68%
Tl 190.801†	-15.2	0.00227	mg/L	0.002633	0.01136	mg/L	0.013163	115.85%
V 292.402†	24664.9	0.2147	mg/L	0.00250	1.074	mg/L	0.0125	1.17%
Zn 206.200†	3843.0	1.129	mg/L	0.0325	5.646	mg/L	0.1624	2.88%

Sequence No.: 18
Sample ID: VS21 ASPK SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 314
Date Collected: 11/26/2012 2:04:27 PM
Data Type: Original

Nebulizer Parameters: VS21 ASPK SWC

Analyte	Back Pressure	Flow
All	221.0 kPa	0.75 L/min

Mean Data: VS21 ASPK SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2444658.5	104.1	%	0.47				0.45%
ScR 361.383	306065.2	104.8	%	2.46				2.34%
Ag 328.068†	32047.9	0.1986	mg/L	0.00228	0.9932	mg/L	0.01141	1.15%
Al 308.215†	135742.6	90.19	mg/L	2.763	451.0	mg/L	13.81	3.06%
As 188.979†	1280.6	0.8887	mg/L	0.01346	4.444	mg/L	0.0673	1.51%
B 249.677†	23.1	0.00291	mg/L	0.000855	0.01455	mg/L	0.004275	29.38%
Ba 233.527†	6924.9	1.616	mg/L	0.0287	8.078	mg/L	0.1435	1.78%
Be 313.042†	113392.8	0.2145	mg/L	0.00787	1.073	mg/L	0.0393	3.67%
Ca 317.933†	225927.3	18.55	mg/L	0.635	92.73	mg/L	3.177	3.43%
Cd 228.802†	6528.9	0.2449	mg/L	0.00470	1.224	mg/L	0.0235	1.92%
Co 228.616†	8733.8	0.2474	mg/L	0.00441	1.237	mg/L	0.0221	1.78%
Cr 267.716†	1958.3	0.3471	mg/L	0.00646	1.736	mg/L	0.0323	1.86%
Cu 324.752†	76614.2	0.3361	mg/L	0.00324	1.681	mg/L	0.0162	0.97%
Fe 273.955†	127950.3	101.1	mg/L	3.35	505.7	mg/L	16.76	3.31%
K 766.490†	16378.5	9.427	mg/L	0.2658	47.13	mg/L	1.329	2.82%
Mg 279.077†	38306.9	31.15	mg/L	1.010	155.7	mg/L	5.05	3.24%
Mn 257.610†	103328.8	3.026	mg/L	0.1010	15.13	mg/L	0.505	3.34%
Mo 202.031†	56.9	0.00292	mg/L	0.000174	0.01459	mg/L	0.000868	5.95%
Na 589.592†	47372.8	4.498	mg/L	0.1439	22.49	mg/L	0.720	3.20%
Na 330.237†	102.4	4.274	mg/L	0.1611	21.37	mg/L	0.805	3.77%
Ni 231.604†	1101.1	0.2995	mg/L	0.00746	1.497	mg/L	0.0373	2.49%
Pb 220.353†	21905.6	2.944	mg/L	0.0527	14.72	mg/L	0.263	1.79%
Sb 206.836†	50.3	0.01530	mg/L	0.001422	0.07648	mg/L	0.007112	9.30%
Se 196.026†	1052.7	0.8040	mg/L	0.01754	4.020	mg/L	0.0877	2.18%
Si 288.158†	5653.3	3.120	mg/L	0.0656	15.60	mg/L	0.328	2.10%
Sn 189.927†	-6.3	0.00107	mg/L	0.000377	0.00534	mg/L	0.001883	35.25%
Sr 421.552†	280545.8	0.3696	mg/L	0.01145	1.848	mg/L	0.0573	3.10%
Ti 334.903†	66720.4	3.719	mg/L	0.1184	18.59	mg/L	0.592	3.18%
Tl 190.801†	1729.6	0.7766	mg/L	0.01302	3.883	mg/L	0.0651	1.68%
V 292.402†	48689.9	0.4289	mg/L	0.00596	2.145	mg/L	0.0298	1.39%
Zn 206.200†	4597.9	1.351	mg/L	0.0247	6.755	mg/L	0.1236	1.83%

Sequence No.: 19 ZZZZZZ
Sample ID: ~~VS21 APOST SWC~~ BA
Analyst: BA 11/28/12
Dilution: 5.000000X

Autosampler Location: 315
Date Collected: 11/26/2012 2:08:13 PM
Data Type: Original

Nebulizer Parameters: VS21 APOST SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS21 APOST SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2444846.0	104.1	%	3.16				3.03%
ScR 361.383	301909.1	103.4	%	1.28				1.24%
Ag 328.068†	80202.6	0.4970	mg/L	0.01650	2.485	mg/L	0.0825	3.32%
Al 308.215†	139450.0	92.65	mg/L	1.371	463.3	mg/L	6.85	1.48%
As 188.979†	3315.3	2.141	mg/L	0.0840	10.71	mg/L	0.420	3.92%
B 249.677†	20.0	0.00181	mg/L	0.001288	0.00905	mg/L	0.006442	71.21%
Ba 233.527†	11805.7	2.766	mg/L	0.0405	13.83	mg/L	0.202	1.46%
Be 313.042†	272843.6	0.5163	mg/L	0.01149	2.581	mg/L	0.0574	2.23%
Ca 317.933†	314976.5	25.86	mg/L	0.436	129.3	mg/L	2.18	1.69%
Cd 228.802†	15328.5	0.5749	mg/L	0.02347	2.874	mg/L	0.1174	4.08%
Co 228.616†	19399.2	0.5595	mg/L	0.02166	2.797	mg/L	0.1083	3.87%
Cr 267.716†	3556.2	0.6291	mg/L	0.01017	3.145	mg/L	0.0509	1.62%
Cu 324.752†	154860.3	0.6759	mg/L	0.01901	3.380	mg/L	0.0951	2.81%
Fe 273.955†	130712.3	103.3	mg/L	1.70	516.6	mg/L	8.50	1.64%
K 766.490†	26791.7	15.42	mg/L	0.213	77.10	mg/L	1.067	1.38%
Mg 279.077†	47076.7	38.29	mg/L	0.401	191.4	mg/L	2.01	1.05%
Mn 257.610†	114037.9	3.340	mg/L	0.0560	16.70	mg/L	0.280	1.68%
Mo 202.031†	63.8	0.00321	mg/L	0.000118	0.01603	mg/L	0.000592	3.69%
Na 589.592†	110065.4	10.45	mg/L	0.207	52.25	mg/L	1.036	1.98%
Na 330.237†	255.2	10.00	mg/L	0.266	50.02	mg/L	1.331	2.66%
Ni 231.604†	2141.9	0.5823	mg/L	0.00847	2.912	mg/L	0.0424	1.45%
Pb 220.353†	30459.2	4.088	mg/L	0.1019	20.44	mg/L	0.509	2.49%
Sb 206.836†	60.8	0.01604	mg/L	0.000769	0.08021	mg/L	0.003843	4.79%
Se 196.026†	2695.9	2.059	mg/L	0.0765	10.30	mg/L	0.382	3.71%
Si 288.158†	6273.8	3.465	mg/L	0.0293	17.32	mg/L	0.146	0.85%
Sn 189.927†	-11.2	0.00063	mg/L	0.000554	0.00317	mg/L	0.002770	87.49%
Sr 421.552†	518449.0	0.6830	mg/L	0.01360	3.415	mg/L	0.0680	1.99%
Ti 334.903†	71661.5	3.994	mg/L	0.0603	19.97	mg/L	0.301	1.51%
Tl 190.801†	4400.7	1.961	mg/L	0.0799	9.805	mg/L	0.3996	4.08%
V 292.402†	82356.6	0.7290	mg/L	0.01780	3.645	mg/L	0.0890	2.44%
Zn 206.200†	5708.3	1.677	mg/L	0.0194	8.387	mg/L	0.0971	1.16%

Sequence No.: 20
Sample ID: VS21 MB1SPK SWC
Analyst: BA
Dilution: 2.000000X

Autosampler Location: 316
Date Collected: 11/26/2012 2:11:29 PM
Data Type: Original

Nebulizer Parameters: VS21 MB1SPK SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS21 MB1SPK SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2450658.7	104.4	%	1.08				1.04%
ScR 361.383	297298.7	101.8	%	2.47				2.43%
Ag 328.068†	87388.5	0.5415	mg/L	0.00608	1.083	mg/L	0.0122	1.12%
Al 308.215†	3152.2	2.087	mg/L	0.0577	4.174	mg/L	0.1154	2.76%
As 188.979†	3403.7	2.082	mg/L	0.0240	4.164	mg/L	0.0481	1.15%
B 249.677†	-0.3	-0.00113	mg/L	0.000377	-0.00227	mg/L	0.000753	33.24%
Ba 233.527†	8833.3	2.082	mg/L	0.0564	4.163	mg/L	0.1128	2.71%
Be 313.042†	285897.0	0.5411	mg/L	0.01739	1.082	mg/L	0.0348	3.21%
Ca 317.933†	124910.2	10.25	mg/L	0.324	20.51	mg/L	0.648	3.16%
Cd 228.802†	14472.1	0.5425	mg/L	0.00582	1.085	mg/L	0.0116	1.07%
Co 228.616†	17972.8	0.5267	mg/L	0.00559	1.053	mg/L	0.0112	1.06%
Cr 267.716†	2980.2	0.5261	mg/L	0.01385	1.052	mg/L	0.0277	2.63%
Cu 324.752†	119178.9	0.5176	mg/L	0.00238	1.035	mg/L	0.0048	0.46%
Fe 273.955†	2697.3	2.129	mg/L	0.0601	4.257	mg/L	0.1202	2.82%
K 766.490†	17768.1	10.23	mg/L	0.276	20.45	mg/L	0.553	2.70%
Mg 279.077†	12969.2	10.56	mg/L	0.308	21.13	mg/L	0.615	2.91%
Mn 257.610†	17865.1	0.5235	mg/L	0.01454	1.047	mg/L	0.0291	2.78%
Mo 202.031†	13.9	0.00063	mg/L	0.000214	0.00125	mg/L	0.000428	34.24%
Na 589.592†	110631.2	10.50	mg/L	0.299	21.01	mg/L	0.597	2.84%
Na 330.237†	279.8	10.40	mg/L	0.224	20.81	mg/L	0.448	2.15%
Ni 231.604†	1943.7	0.5283	mg/L	0.01340	1.057	mg/L	0.0268	2.54%
Pb 220.353†	15150.9	2.025	mg/L	0.0257	4.050	mg/L	0.0515	1.27%
Sb 206.836†	19.0	0.00088	mg/L	0.002035	0.00176	mg/L	0.004071	231.18%
Se 196.026†	2697.1	2.060	mg/L	0.0268	4.121	mg/L	0.0535	1.30%
Si 288.158†	12.8	0.01035	mg/L	0.004346	0.02069	mg/L	0.008692	42.01%
Sn 189.927†	-14.6	-0.00295	mg/L	0.000756	-0.00590	mg/L	0.001512	25.62%
Sr 421.552†	406533.5	0.5355	mg/L	0.01569	1.071	mg/L	0.0314	2.93%
Ti 334.903†	55.8	0.00251	mg/L	0.000493	0.00503	mg/L	0.000985	19.59%
Tl 190.801†	4567.3	2.025	mg/L	0.0226	4.051	mg/L	0.0453	1.12%
V 292.402†	59553.1	0.5314	mg/L	0.00622	1.063	mg/L	0.0124	1.17%
Zn 206.200†	1807.2	0.5311	mg/L	0.01577	1.062	mg/L	0.0315	2.97%

Sequence No.: 21
Sample ID: CV 2
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 11/26/2012 2:15:29 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2410168.5	102.7	%	0.53				0.52%
ScR 361.383	299050.9	102.4	%	3.20				3.13%
Ag 328.068†	170327.8	1.055	mg/L	0.0021	1.055	mg/L	0.0021	0.20%
Al 308.215†	3089.4	2.017	mg/L	0.0752	2.017	mg/L	0.0752	3.73%
As 188.979†	3351.1	2.077	mg/L	0.0086	2.077	mg/L	0.0086	0.41%
B 249.677†	6871.0	1.021	mg/L	0.0348	1.021	mg/L	0.0348	3.41%
Ba 233.527†	4290.9	1.011	mg/L	0.0345	1.011	mg/L	0.0345	3.41%
Be 313.042†	536884.6	1.016	mg/L	0.0365	1.016	mg/L	0.0365	3.60%
Ca 317.933†	23742.3	1.949	mg/L	0.0682	1.949	mg/L	0.0682	3.50%
Cd 228.802†	28001.5	1.063	mg/L	0.0024	1.063	mg/L	0.0024	0.23%
Co 228.616†	35285.5	1.032	mg/L	0.0034	1.032	mg/L	0.0034	0.33%
Cr 267.716†	5762.9	1.019	mg/L	0.0335	1.019	mg/L	0.0335	3.28%
Cu 324.752†	238021.4	1.033	mg/L	0.0005	1.033	mg/L	0.0005	0.05%
Fe 273.955†	2622.0	2.065	mg/L	0.0682	2.065	mg/L	0.0682	3.30%
K 766.490†	34901.7	20.09	mg/L	0.730	20.09	mg/L	0.730	3.63%
Mg 279.077†	2494.1	2.039	mg/L	0.0685	2.039	mg/L	0.0685	3.36%
Mn 257.610†	33646.4	0.9856	mg/L	0.03682	0.9856	mg/L	0.03682	3.74%
Mo 202.031†	18911.1	1.043	mg/L	0.0021	1.043	mg/L	0.0021	0.20%
Na 589.592†	548436.8	52.07	mg/L	1.769	52.07	mg/L	1.769	3.40%
Na 330.237†	1397.0	52.70	mg/L	1.507	52.70	mg/L	1.507	2.86%
Ni 231.604†	3764.0	1.025	mg/L	0.0316	1.025	mg/L	0.0316	3.09%
Pb 220.353†	14993.6	2.004	mg/L	0.0071	2.004	mg/L	0.0071	0.35%
Sb 206.836†	6569.3	2.213	mg/L	0.0068	2.213	mg/L	0.0068	0.31%
Se 196.026†	2652.8	2.026	mg/L	0.0081	2.026	mg/L	0.0081	0.40%
Si 288.158†	3974.6	2.190	mg/L	0.0782	2.190	mg/L	0.0782	3.57%
Sn 189.927†	3615.6	1.061	mg/L	0.0052	1.061	mg/L	0.0052	0.49%
Sr 421.552†	781725.0	1.030	mg/L	0.0366	1.030	mg/L	0.0366	3.56%
Ti 334.903†	19180.6	1.068	mg/L	0.0397	1.068	mg/L	0.0397	3.72%
Tl 190.801†	4584.2	2.029	mg/L	0.0070	2.029	mg/L	0.0070	0.35%
V 292.402†	118359.2	1.056	mg/L	0.0022	1.056	mg/L	0.0022	0.20%
Zn 206.200†	3606.7	1.059	mg/L	0.0359	1.059	mg/L	0.0359	3.39%

Sequence No.: 22
Sample ID: CB 2
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 11/26/2012 2:19:33 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	221.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2418712.5	103.0	%	0.82				0.80%
ScR 361.383	298639.9	102.2	%	2.11				2.07%
Ag 328.068†	36.4	0.00023	mg/L	0.000303	0.00023	mg/L	0.000303	134.16%
Al 308.215†	8.7	0.00574	mg/L	0.009941	0.00574	mg/L	0.009941	173.16%
As 188.979†	2.2	0.00138	mg/L	0.001868	0.00138	mg/L	0.001868	135.69%
B 249.677†	7.8	0.00116	mg/L	0.000796	0.00116	mg/L	0.000796	68.32%
Ba 233.527†	4.1	0.00097	mg/L	0.000696	0.00097	mg/L	0.000696	71.50%
Be 313.042†	103.7	0.00020	mg/L	0.000031	0.00020	mg/L	0.000031	15.79%
Ca 317.933†	14.2	0.00117	mg/L	0.001648	0.00117	mg/L	0.001648	141.25%
Cd 228.802†	1.2	0.00004	mg/L	0.000113	0.00004	mg/L	0.000113	307.53%
Co 228.616†	9.1	0.00027	mg/L	0.000080	0.00027	mg/L	0.000080	29.94%
Cr 267.716†	1.2	0.00021	mg/L	0.001116	0.00021	mg/L	0.001116	541.74%
Cu 324.752†	-45.1	-0.00020	mg/L	0.000068	-0.00020	mg/L	0.000068	34.66%
Fe 273.955†	-1.5	-0.00117	mg/L	0.002212	-0.00117	mg/L	0.002212	189.18%
K 766.490†	32.1	0.01847	mg/L	0.010522	0.01847	mg/L	0.010522	56.95%
Mg 279.077†	-1.0	-0.00080	mg/L	0.003667	-0.00080	mg/L	0.003667	460.32%
Mn 257.610†	6.9	0.00020	mg/L	0.000253	0.00020	mg/L	0.000253	125.70%
Mo 202.031†	14.6	0.00081	mg/L	0.000217	0.00081	mg/L	0.000217	26.88%
Na 589.592†	96.8	0.00919	mg/L	0.006511	0.00919	mg/L	0.006511	70.83%
Na 330.237†	-9.8	-0.3697	mg/L	0.67373	-0.3697	mg/L	0.67373	182.22%
Ni 231.604†	6.0	0.00164	mg/L	0.001410	0.00164	mg/L	0.001410	86.21%
Pb 220.353†	12.9	0.00172	mg/L	0.000561	0.00172	mg/L	0.000561	32.55%
Sb 206.836†	6.2	0.00209	mg/L	0.001629	0.00209	mg/L	0.001629	78.10%
Se 196.026†	-7.1	-0.00540	mg/L	0.004031	-0.00540	mg/L	0.004031	74.65%
Si 288.158†	3.3	0.00184	mg/L	0.004282	0.00184	mg/L	0.004282	233.18%
Sn 189.927†	1.7	0.00051	mg/L	0.000443	0.00051	mg/L	0.000443	86.44%
Sr 421.552†	162.3	0.00021	mg/L	0.000021	0.00021	mg/L	0.000021	9.92%
Ti 334.903†	4.0	0.00022	mg/L	0.000980	0.00022	mg/L	0.000980	439.42%
Tl 190.801†	3.3	0.00147	mg/L	0.001429	0.00147	mg/L	0.001429	96.86%
V 292.402†	20.7	0.00019	mg/L	0.000208	0.00019	mg/L	0.000208	112.03%
Zn 206.200†	1.3	0.00038	mg/L	0.000842	0.00038	mg/L	0.000842	221.89%

Sequence No.: 23
Sample ID: VS21 D SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 317
Date Collected: 11/26/2012 2:23:48 PM
Data Type: Original

Nebulizer Parameters: VS21 D SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS21 D SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2495765.1	106.3	%	0.34				0.32%
ScR 361.383	306178.0	104.8	%	2.21				2.11%
Ag 328.068†	323.4	0.00205	mg/L	0.000021	0.01023	mg/L	0.000106	1.04%
Al 308.215†	116135.0	77.17	mg/L	2.450	385.8	mg/L	12.25	3.18%
As 188.979†	91.1	0.1425	mg/L	0.00475	0.7126	mg/L	0.02376	3.33%
B 249.677†	73.8	0.01090	mg/L	0.000882	0.05450	mg/L	0.004408	8.09%
Ba 233.527†	9073.5	2.124	mg/L	0.0521	10.62	mg/L	0.260	2.45%
Be 313.042†	1202.5	0.00221	mg/L	0.000112	0.01104	mg/L	0.000559	5.06%
Ca 317.933†	280973.1	23.07	mg/L	0.736	115.3	mg/L	3.68	3.19%
Cd 228.802†	1671.4	0.06307	mg/L	0.000298	0.3154	mg/L	0.00149	0.47%
Co 228.616†	1448.2	0.03519	mg/L	0.000031	0.1759	mg/L	0.00015	0.09%
Cr 267.716†	523.7	0.09346	mg/L	0.003063	0.4673	mg/L	0.01532	3.28%
Cu 324.752†	35998.8	0.1594	mg/L	0.00103	0.7969	mg/L	0.00513	0.64%
Fe 273.955†	110560.3	87.40	mg/L	2.845	437.0	mg/L	14.23	3.26%
K 766.490†	13186.3	7.589	mg/L	0.2233	37.95	mg/L	1.117	2.94%
Mg 279.077†	24331.1	19.77	mg/L	0.635	98.85	mg/L	3.177	3.21%
Mn 257.610†	217782.5	6.378	mg/L	0.1987	31.89	mg/L	0.993	3.12%
Mo 202.031†	63.9	0.00327	mg/L	0.000461	0.01635	mg/L	0.002307	14.11%
Na 589.592†	13486.6	1.281	mg/L	0.0341	6.403	mg/L	0.1705	2.66%
Na 330.237†	32.6	1.056	mg/L	0.1194	5.280	mg/L	0.5970	11.31%
Ni 231.604†	294.9	0.08029	mg/L	0.001754	0.4015	mg/L	0.00877	2.18%
Pb 220.353†	22018.5	2.957	mg/L	0.0085	14.78	mg/L	0.042	0.29%
Sb 206.836†	63.4	0.02196	mg/L	0.002064	0.1098	mg/L	0.01032	9.40%
Se 196.026†	14.7	0.01116	mg/L	0.011402	0.05581	mg/L	0.057010	102.15%
Si 288.158†	4140.4	2.285	mg/L	0.0527	11.42	mg/L	0.264	2.31%
Sn 189.927†	-3.3	0.00242	mg/L	0.001005	0.01209	mg/L	0.005024	41.54%
Sr 421.552†	240341.8	0.3166	mg/L	0.00978	1.583	mg/L	0.0489	3.09%
Ti 334.903†	55297.3	3.082	mg/L	0.0984	15.41	mg/L	0.492	3.19%
Tl 190.801†	-4.4	0.00659	mg/L	0.000972	0.03294	mg/L	0.004861	14.76%
V 292.402†	16936.5	0.1471	mg/L	0.00051	0.7353	mg/L	0.00255	0.35%
Zn 206.200†	9087.6	2.670	mg/L	0.0646	13.35	mg/L	0.323	2.42%

Sequence No.: 24
Sample ID: VS21 E SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 318
Date Collected: 11/26/2012 2:27:49 PM
Data Type: Original

Nebulizer Parameters: VS21 E SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS21 E SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2530178.5	107.8	%	0.66				0.61%
ScR 361.383	313314.1	107.3	%	2.25				2.09%
Ag 328.068†	100.9	0.00067	mg/L	0.000236	0.00333	mg/L	0.001179	35.42%
Al 308.215†	113273.5	75.27	mg/L	1.626	376.3	mg/L	8.13	2.16%
As 188.979†	33.6	0.1026	mg/L	0.00260	0.5130	mg/L	0.01298	2.53%
B 249.677†	61.9	0.00913	mg/L	0.000796	0.04567	mg/L	0.003978	8.71%
Ba 233.527†	7304.8	1.708	mg/L	0.0394	8.540	mg/L	0.1971	2.31%
Be 313.042†	1046.0	0.00192	mg/L	0.000079	0.00958	mg/L	0.000395	4.12%
Ca 317.933†	268458.0	22.04	mg/L	0.465	110.2	mg/L	2.33	2.11%
Cd 228.802†	785.1	0.02929	mg/L	0.000241	0.1464	mg/L	0.00121	0.82%
Co 228.616†	1426.2	0.03495	mg/L	0.000180	0.1748	mg/L	0.00090	0.52%
Cr 267.716†	521.1	0.09304	mg/L	0.001397	0.4652	mg/L	0.00698	1.50%
Cu 324.752†	19469.0	0.08747	mg/L	0.000120	0.4374	mg/L	0.00060	0.14%
Fe 273.955†	105678.6	83.54	mg/L	1.744	417.7	mg/L	8.72	2.09%
K 766.490†	11280.8	6.493	mg/L	0.1247	32.46	mg/L	0.623	1.92%
Mg 279.077†	23364.4	18.99	mg/L	0.401	94.93	mg/L	2.005	2.11%
Mn 257.610†	184294.3	5.397	mg/L	0.1132	26.98	mg/L	0.566	2.10%
Mo 202.031†	58.2	0.00297	mg/L	0.000015	0.01484	mg/L	0.000076	0.51%
Na 589.592†	10453.0	0.9925	mg/L	0.02256	4.963	mg/L	0.1128	2.27%
Na 330.237†	16.7	0.6670	mg/L	0.19229	3.335	mg/L	0.9614	28.83%
Ni 231.604†	281.5	0.07665	mg/L	0.002014	0.3833	mg/L	0.01007	2.63%
Pb 220.353†	6471.8	0.8793	mg/L	0.00078	4.396	mg/L	0.0039	0.09%
Sb 206.836†	27.0	0.00956	mg/L	0.000834	0.04781	mg/L	0.004171	8.72%
Se 196.026†	6.5	0.00489	mg/L	0.004275	0.02443	mg/L	0.021373	87.48%
Si 288.158†	4159.0	2.295	mg/L	0.0528	11.47	mg/L	0.264	2.30%
Sn 189.927†	-17.1	-0.00183	mg/L	0.000950	-0.00917	mg/L	0.004752	51.84%
Sr 421.552†	214582.0	0.2827	mg/L	0.00587	1.413	mg/L	0.0294	2.08%
Ti 334.903†	52272.2	2.913	mg/L	0.0644	14.57	mg/L	0.322	2.21%
Tl 190.801†	-6.4	0.00535	mg/L	0.005228	0.02676	mg/L	0.026142	97.69%
V 292.402†	15844.4	0.1374	mg/L	0.00032	0.6871	mg/L	0.00162	0.24%
Zn 206.200†	6481.1	1.904	mg/L	0.0430	9.521	mg/L	0.2148	2.26%

Sequence No.: 25
Sample ID: VS21 F SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 319
Date Collected: 11/26/2012 2:31:49 PM
Data Type: Original

Nebulizer Parameters: VS21 F SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS21 F SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2593650.1	110.5	%	0.61				0.55%
ScR 361.383	314400.5	107.6	%	0.64				0.59%
Ag 328.068†	-80.0	-0.00045	mg/L	0.000216	-0.00224	mg/L	0.001081	48.20%
Al 308.215†	131686.9	87.50	mg/L	0.947	437.5	mg/L	4.74	1.08%
As 188.979†	-69.2	0.05891	mg/L	0.001942	0.2946	mg/L	0.00971	3.30%
B 249.677†	44.1	0.00648	mg/L	0.001025	0.03238	mg/L	0.005124	15.82%
Ba 233.527†	4556.0	1.059	mg/L	0.0039	5.295	mg/L	0.0194	0.37%
Be 313.042†	1104.0	0.00201	mg/L	0.000016	0.01007	mg/L	0.000082	0.81%
Ca 317.933†	173351.5	14.23	mg/L	0.159	71.15	mg/L	0.797	1.12%
Cd 228.802†	89.9	0.00295	mg/L	0.000045	0.01474	mg/L	0.000223	1.51%
Co 228.616†	1553.9	0.03739	mg/L	0.000350	0.1870	mg/L	0.00175	0.94%
Cr 267.716†	543.2	0.09735	mg/L	0.000261	0.4868	mg/L	0.00130	0.27%
Cu 324.752†	19729.0	0.08875	mg/L	0.000257	0.4437	mg/L	0.00129	0.29%
Fe 273.955†	114137.0	90.23	mg/L	0.912	451.1	mg/L	4.56	1.01%
K 766.490†	11639.8	6.699	mg/L	0.0713	33.50	mg/L	0.356	1.06%
Mg 279.077†	25608.6	20.81	mg/L	0.231	104.0	mg/L	1.16	1.11%
Mn 257.610†	111924.3	3.277	mg/L	0.0342	16.39	mg/L	0.171	1.04%
Mo 202.031†	35.4	0.00179	mg/L	0.000284	0.00897	mg/L	0.001419	15.82%
Na 589.592†	13426.2	1.275	mg/L	0.0152	6.374	mg/L	0.0758	1.19%
Na 330.237†	12.8	1.145	mg/L	0.1817	5.723	mg/L	0.9084	15.87%
Ni 231.604†	327.5	0.08918	mg/L	0.000779	0.4459	mg/L	0.00389	0.87%
Pb 220.353†	431.0	0.07487	mg/L	0.000362	0.3744	mg/L	0.00181	0.48%
Sb 206.836†	8.7	0.00368	mg/L	0.000034	0.01839	mg/L	0.000171	0.93%
Se 196.026†	9.4	0.00704	mg/L	0.002189	0.03520	mg/L	0.010944	31.09%
Si 288.158†	4263.3	2.352	mg/L	0.0011	11.76	mg/L	0.005	0.05%
Sn 189.927†	-23.1	-0.00449	mg/L	0.000718	-0.02245	mg/L	0.003591	15.99%
Sr 421.552†	132241.5	0.1742	mg/L	0.00183	0.8710	mg/L	0.00916	1.05%
Ti 334.903†	64034.0	3.569	mg/L	0.0355	17.85	mg/L	0.178	1.00%
Tl 190.801†	-11.0	0.00392	mg/L	0.003377	0.01961	mg/L	0.016885	86.09%
V 292.402†	18293.8	0.1583	mg/L	0.00112	0.7914	mg/L	0.00559	0.71%
Zn 206.200†	1577.5	0.4635	mg/L	0.00175	2.317	mg/L	0.0088	0.38%

Sequence No.: 26
Sample ID: VS21 G SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 320
Date Collected: 11/26/2012 2:35:49 PM
Data Type: Original

Nebulizer Parameters: VS21 G SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS21 G SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2580749.0	109.9	%	0.57				0.52%
ScR 361.383	314417.7	107.6	%	2.61				2.43%
Ag 328.068†	-122.2	-0.00070	mg/L	0.000079	-0.00350	mg/L	0.000395	11.29%
Al 308.215†	127783.7	84.91	mg/L	2.788	424.5	mg/L	13.94	3.28%
As 188.979†	-172.5	0.02155	mg/L	0.006892	0.1078	mg/L	0.03446	31.98%
B 249.677†	26.1	0.00379	mg/L	0.000733	0.01895	mg/L	0.003664	19.34%
Ba 233.527†	2818.8	0.6489	mg/L	0.01592	3.244	mg/L	0.0796	2.45%
Be 313.042†	1056.6	0.00191	mg/L	0.000084	0.00953	mg/L	0.000422	4.43%
Ca 317.933†	183524.3	15.07	mg/L	0.505	75.33	mg/L	2.526	3.35%
Cd 228.802†	39.1	0.00137	mg/L	0.000291	0.00684	mg/L	0.001454	21.27%
Co 228.616†	1669.4	0.03900	mg/L	0.001050	0.1950	mg/L	0.00525	2.69%
Cr 267.716†	577.6	0.1034	mg/L	0.00246	0.5172	mg/L	0.01230	2.38%
Cu 324.752†	25711.6	0.1147	mg/L	0.00133	0.5735	mg/L	0.00665	1.16%
Fe 273.955†	119561.8	94.51	mg/L	3.615	472.6	mg/L	18.07	3.82%
K 766.490†	13473.0	7.754	mg/L	0.2287	38.77	mg/L	1.144	2.95%
Mg 279.077†	29728.3	24.16	mg/L	0.797	120.8	mg/L	3.98	3.30%
Mn 257.610†	57478.2	1.683	mg/L	0.0611	8.416	mg/L	0.3053	3.63%
Mo 202.031†	26.4	0.00129	mg/L	0.000150	0.00643	mg/L	0.000750	11.65%
Na 589.592†	15751.8	1.496	mg/L	0.0483	7.478	mg/L	0.2414	3.23%
Na 330.237†	12.9	1.406	mg/L	0.0929	7.028	mg/L	0.4643	6.61%
Ni 231.604†	304.6	0.08295	mg/L	0.003292	0.4147	mg/L	0.01646	3.97%
Pb 220.353†	126.6	0.03338	mg/L	0.001641	0.1669	mg/L	0.00821	4.92%
Sb 206.836†	5.2	0.00292	mg/L	0.001165	0.01460	mg/L	0.005825	39.90%
Se 196.026†	15.9	0.01201	mg/L	0.004350	0.06007	mg/L	0.021752	36.21%
Si 288.158†	4944.4	2.728	mg/L	0.0685	13.64	mg/L	0.343	2.51%
Sn 189.927†	-29.3	-0.00608	mg/L	0.001362	-0.03038	mg/L	0.006810	22.42%
Sr 421.552†	132269.2	0.1742	mg/L	0.00572	0.8712	mg/L	0.02862	3.29%
Ti 334.903†	80271.0	4.474	mg/L	0.1530	22.37	mg/L	0.765	3.42%
Tl 190.801†	-12.7	0.00347	mg/L	0.001566	0.01735	mg/L	0.007828	45.11%
V 292.402†	22334.4	0.1933	mg/L	0.00272	0.9665	mg/L	0.01358	1.40%
Zn 206.200†	1024.0	0.3009	mg/L	0.00751	1.504	mg/L	0.0376	2.50%

Sequence No.: 27
Sample ID: VS21 H SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 321
Date Collected: 11/26/2012 2:39:49 PM
Data Type: Original

Nebulizer Parameters: VS21 H SWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS21 H SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2617970.6	111.5	%	0.62				0.55%
ScR 361.383	315427.4	108.0	%	1.12				1.04%
Ag 328.068†	-40.9	-0.00019	mg/L	0.000211	-0.00097	mg/L	0.001055	109.21%
Al 308.215†	103754.8	68.94	mg/L	1.145	344.7	mg/L	5.73	1.66%
As 188.979†	-151.8	0.02185	mg/L	0.003548	0.1093	mg/L	0.01774	16.23%
B 249.677†	9.2	0.00127	mg/L	0.000205	0.00633	mg/L	0.001026	16.21%
Ba 233.527†	2071.3	0.4731	mg/L	0.00693	2.366	mg/L	0.0346	1.46%
Be 313.042†	920.7	0.00165	mg/L	0.000043	0.00826	mg/L	0.000216	2.61%
Ca 317.933†	189480.4	15.55	mg/L	0.280	77.77	mg/L	1.398	1.80%
Cd 228.802†	30.2	0.00097	mg/L	0.000041	0.00483	mg/L	0.000205	4.25%
Co 228.616†	1641.5	0.03907	mg/L	0.000213	0.1954	mg/L	0.00106	0.54%
Cr 267.716†	618.8	0.1107	mg/L	0.00151	0.5535	mg/L	0.00753	1.36%
Cu 324.752†	28420.0	0.1264	mg/L	0.00058	0.6321	mg/L	0.00291	0.46%
Fe 273.955†	116112.3	91.79	mg/L	1.798	458.9	mg/L	8.99	1.96%
K 766.490†	15309.9	8.812	mg/L	0.1798	44.06	mg/L	0.899	2.04%
Mg 279.077†	29277.9	23.80	mg/L	0.399	119.0	mg/L	2.00	1.68%
Mn 257.610†	46093.6	1.350	mg/L	0.0242	6.749	mg/L	0.1210	1.79%
Mo 202.031†	33.4	0.00167	mg/L	0.000397	0.00835	mg/L	0.001985	23.77%
Na 589.592†	12017.6	1.141	mg/L	0.0156	5.705	mg/L	0.0780	1.37%
Na 330.237†	6.0	1.079	mg/L	0.1548	5.394	mg/L	0.7740	14.35%
Ni 231.604†	303.3	0.08257	mg/L	0.001179	0.4128	mg/L	0.00589	1.43%
Pb 220.353†	124.3	0.02936	mg/L	0.000573	0.1468	mg/L	0.00286	1.95%
Sb 206.836†	5.6	0.00281	mg/L	0.001119	0.01407	mg/L	0.005593	39.74%
Se 196.026†	5.0	0.00370	mg/L	0.005694	0.01850	mg/L	0.028468	153.91%
Si 288.158†	5313.4	2.931	mg/L	0.0476	14.66	mg/L	0.238	1.62%
Sn 189.927†	-23.4	-0.00435	mg/L	0.000466	-0.02176	mg/L	0.002329	10.70%
Sr 421.552†	127461.7	0.1679	mg/L	0.00294	0.8395	mg/L	0.01469	1.75%
Ti 334.903†	72548.5	4.044	mg/L	0.0666	20.22	mg/L	0.333	1.65%
Tl 190.801†	-7.7	0.00538	mg/L	0.000248	0.02689	mg/L	0.001241	4.62%
V 292.402†	23391.2	0.2030	mg/L	0.00120	1.015	mg/L	0.0060	0.59%
Zn 206.200†	720.3	0.2116	mg/L	0.00259	1.058	mg/L	0.0130	1.22%

Sequence No.: 28
Sample ID: VS21 I SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 322
Date Collected: 11/26/2012 2:43:49 PM
Data Type: Original

Nebulizer Parameters: VS21 I SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS21 I SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2585660.5	110.1	%	0.95				0.86%
ScR 361.383	311897.8	106.8	%	1.83				1.71%
Ag 328.068†	119.1	0.00078	mg/L	0.000110	0.00390	mg/L	0.000551	14.12%
Al 308.215†	132675.0	88.16	mg/L	1.890	440.8	mg/L	9.45	2.14%
As 188.979†	48.5	0.1266	mg/L	0.00585	0.6330	mg/L	0.02925	4.62%
B 249.677†	79.0	0.01163	mg/L	0.000823	0.05816	mg/L	0.004116	7.08%
Ba 233.527†	7064.1	1.645	mg/L	0.0309	8.225	mg/L	0.1544	1.88%
Be 313.042†	2019.7	0.00375	mg/L	0.000105	0.01876	mg/L	0.000526	2.81%
Ca 317.933†	429285.7	35.24	mg/L	0.772	176.2	mg/L	3.86	2.19%
Cd 228.802†	1694.6	0.06388	mg/L	0.000728	0.3194	mg/L	0.00364	1.14%
Co 228.616†	2112.3	0.05351	mg/L	0.000407	0.2676	mg/L	0.00203	0.76%
Cr 267.716†	829.9	0.1476	mg/L	0.00236	0.7378	mg/L	0.01180	1.60%
Cu 324.752†	34097.3	0.1525	mg/L	0.00129	0.7623	mg/L	0.00644	0.84%
Fe 273.955†	153587.3	121.4	mg/L	2.74	607.1	mg/L	13.69	2.26%
K 766.490†	13708.0	7.890	mg/L	0.1710	39.45	mg/L	0.855	2.17%
Mg 279.077†	36540.1	29.70	mg/L	0.674	148.5	mg/L	3.37	2.27%
Mn 257.610†	380958.5	11.16	mg/L	0.243	55.78	mg/L	1.217	2.18%
Mo 202.031†	107.9	0.00556	mg/L	0.000286	0.02781	mg/L	0.001428	5.14%
Na 589.592†	5374.3	0.5103	mg/L	0.00889	2.551	mg/L	0.0444	1.74%
Na 330.237†	11.8	0.3060	mg/L	0.23426	1.530	mg/L	1.1713	76.56%
Ni 231.604†	560.3	0.1526	mg/L	0.00231	0.7628	mg/L	0.01156	1.52%
Pb 220.353†	15864.7	2.136	mg/L	0.0148	10.68	mg/L	0.074	0.69%
Sb 206.836†	43.6	0.01461	mg/L	0.000566	0.07304	mg/L	0.002832	3.88%
Se 196.026†	12.7	0.00960	mg/L	0.001574	0.04798	mg/L	0.007871	16.41%
Si 288.158†	5325.2	2.939	mg/L	0.0601	14.69	mg/L	0.301	2.05%
Sn 189.927†	-14.1	0.00079	mg/L	0.001563	0.00396	mg/L	0.007814	197.10%
Sr 421.552†	206781.8	0.2724	mg/L	0.00583	1.362	mg/L	0.0291	2.14%
Ti 334.903†	62136.0	3.462	mg/L	0.0736	17.31	mg/L	0.368	2.13%
Tl 190.801†	-18.8	0.00376	mg/L	0.001225	0.01878	mg/L	0.006125	32.62%
V 292.402†	16372.0	0.1416	mg/L	0.00096	0.7080	mg/L	0.00481	0.68%
Zn 206.200†	9603.2	2.822	mg/L	0.0536	14.11	mg/L	0.268	1.90%

Sequence No.: 29
Sample ID: VS21 J SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 323
Date Collected: 11/26/2012 2:47:49 PM
Data Type: Original

Nebulizer Parameters: VS21 J SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS21 J SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2470324.6	105.2	%	0.70				0.66%
ScR 361.383	308643.1	105.7	%	2.06				1.95%
Ag 328.068†	409.5	0.00260	mg/L	0.000386	0.01301	mg/L	0.001928	14.82%
Al 308.215†	206160.0	137.0	mg/L	3.26	684.9	mg/L	16.30	2.38%
As 188.979†	-66.7	0.09585	mg/L	0.003159	0.4792	mg/L	0.01579	3.30%
B 249.677†	55.0	0.00799	mg/L	0.000703	0.03997	mg/L	0.003514	8.79%
Ba 233.527†	4580.9	1.053	mg/L	0.0256	5.266	mg/L	0.1280	2.43%
Be 313.042†	2543.6	0.00471	mg/L	0.000152	0.02355	mg/L	0.000760	3.23%
Ca 317.933†	291416.8	23.92	mg/L	0.626	119.6	mg/L	3.13	2.62%
Cd 228.802†	718.3	0.02656	mg/L	0.000253	0.1328	mg/L	0.00126	0.95%
Co 228.616†	3227.1	0.08306	mg/L	0.000505	0.4153	mg/L	0.00252	0.61%
Cr 267.716†	875.6	0.1571	mg/L	0.00373	0.7857	mg/L	0.01867	2.38%
Cu 324.752†	48297.5	0.2156	mg/L	0.00099	1.078	mg/L	0.0050	0.46%
Fe 273.955†	204604.7	161.7	mg/L	4.17	808.7	mg/L	20.85	2.58%
K 766.490†	13246.4	7.624	mg/L	0.1748	38.12	mg/L	0.874	2.29%
Mg 279.077†	45708.3	37.14	mg/L	0.948	185.7	mg/L	4.74	2.55%
Mn 257.610†	217294.1	6.363	mg/L	0.1621	31.81	mg/L	0.810	2.55%
Mo 202.031†	108.3	0.00571	mg/L	0.000238	0.02854	mg/L	0.001192	4.18%
Na 589.592†	7123.7	0.6764	mg/L	0.01613	3.382	mg/L	0.0807	2.38%
Na 330.237†	-2.7	0.4409	mg/L	0.34032	2.204	mg/L	1.7016	77.19%
Ni 231.604†	979.0	0.2665	mg/L	0.00561	1.333	mg/L	0.0281	2.11%
Pb 220.353†	5396.4	0.7471	mg/L	0.00044	3.736	mg/L	0.0022	0.06%
Sb 206.836†	28.4	0.01026	mg/L	0.003049	0.05128	mg/L	0.015244	29.73%
Se 196.026†	22.8	0.01723	mg/L	0.001570	0.08616	mg/L	0.007850	9.11%
Si 288.158†	6028.5	3.327	mg/L	0.0821	16.64	mg/L	0.410	2.47%
Sn 189.927†	-27.7	-0.00443	mg/L	0.000971	-0.02215	mg/L	0.004854	21.92%
Sr 421.552†	181719.4	0.2394	mg/L	0.00564	1.197	mg/L	0.0282	2.36%
Ti 334.903†	86600.9	4.827	mg/L	0.1192	24.13	mg/L	0.596	2.47%
Tl 190.801†	-37.1	-0.00057	mg/L	0.003472	-0.00287	mg/L	0.017361	605.68%
V 292.402†	25710.0	0.2217	mg/L	0.00082	1.108	mg/L	0.0041	0.37%
Zn 206.200†	5739.2	1.686	mg/L	0.0442	8.431	mg/L	0.2212	2.62%

Sequence No.: 30
Sample ID: VS21 K SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 324
Date Collected: 11/26/2012 2:51:49 PM
Data Type: Original

Nebulizer Parameters: VS21 K SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS21 K SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2454859.4	104.6	%	0.36				0.35%
ScR 361.383	309855.6	106.1	%	1.88				1.78%
Ag 328.068†	-20.7	-0.00008	mg/L	0.000163	-0.00040	mg/L	0.000815	204.96%
Al 308.215†	121778.6	80.92	mg/L	2.105	404.6	mg/L	10.53	2.60%
As 188.979†	-86.4	0.05166	mg/L	0.001505	0.2583	mg/L	0.00753	2.91%
B 249.677†	57.8	0.00851	mg/L	0.000971	0.04255	mg/L	0.004855	11.41%
Ba 233.527†	4226.6	0.9817	mg/L	0.01533	4.908	mg/L	0.0766	1.56%
Be 313.042†	1033.6	0.00188	mg/L	0.000068	0.00939	mg/L	0.000340	3.62%
Ca 317.933†	154256.7	12.66	mg/L	0.288	63.32	mg/L	1.441	2.28%
Cd 228.802†	364.1	0.01355	mg/L	0.000017	0.06776	mg/L	0.000087	0.13%
Co 228.616†	1625.2	0.03930	mg/L	0.000298	0.1965	mg/L	0.00149	0.76%
Cr 267.716†	524.9	0.09395	mg/L	0.001777	0.4698	mg/L	0.00889	1.89%
Cu 324.752†	15851.0	0.07182	mg/L	0.000397	0.3591	mg/L	0.00198	0.55%
Fe 273.955†	111942.3	88.49	mg/L	2.212	442.5	mg/L	11.06	2.50%
K 766.490†	9488.2	5.461	mg/L	0.1587	27.30	mg/L	0.793	2.91%
Mg 279.077†	23857.9	19.38	mg/L	0.520	96.92	mg/L	2.599	2.68%
Mn 257.610†	194724.3	5.702	mg/L	0.1369	28.51	mg/L	0.685	2.40%
Mo 202.031†	36.3	0.00186	mg/L	0.000117	0.00931	mg/L	0.000585	6.28%
Na 589.592†	11001.8	1.045	mg/L	0.0202	5.223	mg/L	0.1010	1.93%
Na 330.237†	7.2	0.8358	mg/L	0.12078	4.179	mg/L	0.6039	14.45%
Ni 231.604†	277.7	0.07561	mg/L	0.002642	0.3781	mg/L	0.01321	3.49%
Pb 220.353†	5949.6	0.8107	mg/L	0.00328	4.053	mg/L	0.0164	0.40%
Sb 206.836†	25.1	0.00936	mg/L	0.002085	0.04678	mg/L	0.010426	22.29%
Se 196.026†	14.1	0.01066	mg/L	0.008427	0.05328	mg/L	0.042137	79.08%
Si 288.158†	4245.3	2.342	mg/L	0.0369	11.71	mg/L	0.185	1.58%
Sn 189.927†	-12.0	-0.00138	mg/L	0.000983	-0.00691	mg/L	0.004915	71.11%
Sr 421.552†	121217.7	0.1597	mg/L	0.00424	0.7984	mg/L	0.02119	2.65%
Ti 334.903†	66042.4	3.681	mg/L	0.0936	18.41	mg/L	0.468	2.54%
Tl 190.801†	-19.7	-0.00018	mg/L	0.003220	-0.00092	mg/L	0.016099	>999.9%
V 292.402†	18903.5	0.1641	mg/L	0.00070	0.8203	mg/L	0.00350	0.43%
Zn 206.200†	2835.1	0.8330	mg/L	0.01466	4.165	mg/L	0.0733	1.76%

Sequence No.: 31
Sample ID: VS21 L SWC
Analyst: BA
Dilution: 5.000000X

Autosampler Location: 325
Date Collected: 11/26/2012 2:55:49 PM
Data Type: Original

Nebulizer Parameters: VS21 L SWC

Analyte	Back Pressure	Flow
All	221.0 kPa	0.75 L/min

Mean Data: VS21 L SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2456673.9	104.6	%	0.29				0.28%
ScR 361.383	306149.0	104.8	%	1.36				1.30%
Ag 328.068†	38.4	0.00028	mg/L	0.000120	0.00140	mg/L	0.000600	42.95%
Al 308.215†	104298.3	69.30	mg/L	1.500	346.5	mg/L	7.50	2.16%
As 188.979†	-95.5	0.04534	mg/L	0.003454	0.2267	mg/L	0.01727	7.62%
B 249.677†	73.5	0.01085	mg/L	0.001897	0.05426	mg/L	0.009483	17.48%
Ba 233.527†	2729.5	0.6314	mg/L	0.00983	3.157	mg/L	0.0491	1.56%
Be 313.042†	848.3	0.00153	mg/L	0.000040	0.00766	mg/L	0.000201	2.63%
Ca 317.933†	515427.4	42.31	mg/L	0.966	211.6	mg/L	4.83	2.28%
Cd 228.802†	481.3	0.01823	mg/L	0.000235	0.09116	mg/L	0.001175	1.29%
Co 228.616†	1386.7	0.03247	mg/L	0.000129	0.1623	mg/L	0.00064	0.40%
Cr 267.716†	471.9	0.08402	mg/L	0.001329	0.4201	mg/L	0.00664	1.58%
Cu 324.752†	20341.0	0.09063	mg/L	0.001091	0.4531	mg/L	0.00545	1.20%
Fe 273.955†	92315.2	72.98	mg/L	1.794	364.9	mg/L	8.97	2.46%
K 766.490†	7839.4	4.512	mg/L	0.0797	22.56	mg/L	0.398	1.77%
Mg 279.077†	23151.7	18.82	mg/L	0.412	94.09	mg/L	2.062	2.19%
Mn 257.610†	91436.7	2.677	mg/L	0.0601	13.39	mg/L	0.301	2.25%
Mo 202.031†	79.7	0.00393	mg/L	0.000251	0.01967	mg/L	0.001255	6.38%
Na 589.592†	13157.3	1.249	mg/L	0.0247	6.246	mg/L	0.1234	1.98%
Na 330.237†	9.4	0.9178	mg/L	0.28736	4.589	mg/L	1.4368	31.31%
Ni 231.604†	231.3	0.06297	mg/L	0.001278	0.3149	mg/L	0.00639	2.03%
Pb 220.353†	6047.6	0.8216	mg/L	0.00420	4.108	mg/L	0.0210	0.51%
Sb 206.836†	19.0	0.00728	mg/L	0.002002	0.03638	mg/L	0.010008	27.51%
Se 196.026†	2.4	0.00170	mg/L	0.002147	0.00848	mg/L	0.010734	126.53%
Si 288.158†	4498.9	2.482	mg/L	0.0406	12.41	mg/L	0.203	1.63%
Sn 189.927†	-35.4	-0.00457	mg/L	0.000312	-0.02287	mg/L	0.001559	6.81%
Sr 421.552†	210226.6	0.2769	mg/L	0.00597	1.385	mg/L	0.0299	2.16%
Ti 334.903†	66655.2	3.714	mg/L	0.0814	18.57	mg/L	0.407	2.19%
Tl 190.801†	-3.5	0.00552	mg/L	0.003909	0.02759	mg/L	0.019545	70.84%
V 292.402†	16338.4	0.1413	mg/L	0.00138	0.7064	mg/L	0.00690	0.98%
Zn 206.200†	2919.0	0.8577	mg/L	0.01572	4.288	mg/L	0.0786	1.83%

Sequence No.: 32
Sample ID: CV3
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 11/26/2012 2:59:49 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2390881.8	101.8	%	0.39				0.38%
ScR 361.383	291699.0	99.86	%	2.688				2.69%
Ag 328.068†	169856.7	1.053	mg/L	0.0056	1.053	mg/L	0.0056	0.53%
Al 308.215†	3204.8	2.094	mg/L	0.0704	2.094	mg/L	0.0704	3.36%
As 188.979†	3362.1	2.084	mg/L	0.0175	2.084	mg/L	0.0175	0.84%
B 249.677†	6939.5	1.032	mg/L	0.0329	1.032	mg/L	0.0329	3.18%
Ba 233.527†	4345.9	1.024	mg/L	0.0311	1.024	mg/L	0.0311	3.04%
Be 313.042†	541688.5	1.025	mg/L	0.0279	1.025	mg/L	0.0279	2.72%
Ca 317.933†	24212.3	1.988	mg/L	0.0538	1.988	mg/L	0.0538	2.71%
Cd 228.802†	27979.7	1.062	mg/L	0.0027	1.062	mg/L	0.0027	0.26%
Co 228.616†	35241.4	1.031	mg/L	0.0035	1.031	mg/L	0.0035	0.34%
Cr 267.716†	5829.8	1.031	mg/L	0.0332	1.031	mg/L	0.0332	3.22%
Cu 324.752†	236988.2	1.029	mg/L	0.0069	1.029	mg/L	0.0069	0.67%
Fe 273.955†	2721.2	2.144	mg/L	0.0658	2.144	mg/L	0.0658	3.07%
K 766.490†	35332.7	20.34	mg/L	0.595	20.34	mg/L	0.595	2.93%
Mg 279.077†	2542.0	2.078	mg/L	0.0669	2.078	mg/L	0.0669	3.22%
Mn 257.610†	34157.7	1.001	mg/L	0.0290	1.001	mg/L	0.0290	2.90%
Mo 202.031†	18879.8	1.041	mg/L	0.0052	1.041	mg/L	0.0052	0.50%
Na 589.592†	554853.0	52.68	mg/L	1.459	52.68	mg/L	1.459	2.77%
Na 330.237†	1404.5	52.98	mg/L	1.347	52.98	mg/L	1.347	2.54%
Ni 231.604†	3820.7	1.041	mg/L	0.0323	1.041	mg/L	0.0323	3.11%
Pb 220.353†	14982.4	2.003	mg/L	0.0070	2.003	mg/L	0.0070	0.35%
Sb 206.836†	6575.5	2.215	mg/L	0.0144	2.215	mg/L	0.0144	0.65%
Se 196.026†	2660.4	2.032	mg/L	0.0093	2.032	mg/L	0.0093	0.46%
Si 288.158†	4024.0	2.217	mg/L	0.0791	2.217	mg/L	0.0791	3.57%
Sn 189.927†	3632.6	1.066	mg/L	0.0075	1.066	mg/L	0.0075	0.71%
Sr 421.552†	790126.1	1.041	mg/L	0.0294	1.041	mg/L	0.0294	2.82%
Ti 334.903†	19443.6	1.083	mg/L	0.0291	1.083	mg/L	0.0291	2.69%
Tl 190.801†	4588.1	2.031	mg/L	0.0115	2.031	mg/L	0.0115	0.57%
V 292.402†	117958.2	1.052	mg/L	0.0067	1.052	mg/L	0.0067	0.64%
Zn 206.200†	3662.9	1.076	mg/L	0.0316	1.076	mg/L	0.0316	2.94%

Sequence No.: 33
Sample ID: CB 3
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 11/26/2012 3:03:52 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	221.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2399386.7	102.2	%	0.41				0.40%
ScR 361.383	296938.4	101.6	%	3.40				3.35%
Ag 328.068†	53.3	0.00033	mg/L	0.000044	0.00033	mg/L	0.000044	13.38%
Al 308.215†	37.4	0.02485	mg/L	0.001067	0.02485	mg/L	0.001067	4.29%
As 188.979†	0.6	0.00037	mg/L	0.001564	0.00037	mg/L	0.001564	420.81%
B 249.677†	3.6	0.00054	mg/L	0.000668	0.00054	mg/L	0.000668	124.49%
Ba 233.527†	3.0	0.00071	mg/L	0.000155	0.00071	mg/L	0.000155	21.77%
Be 313.042†	82.0	0.00016	mg/L	0.000055	0.00016	mg/L	0.000055	35.77%
Ca 317.933†	80.7	0.00662	mg/L	0.001165	0.00662	mg/L	0.001165	17.59%
Cd 228.802†	4.1	0.00016	mg/L	0.000090	0.00016	mg/L	0.000090	57.51%
Co 228.616†	7.6	0.00022	mg/L	0.000103	0.00022	mg/L	0.000103	46.57%
Cr 267.716†	5.9	0.00104	mg/L	0.001777	0.00104	mg/L	0.001777	171.55%
Cu 324.752†	-20.8	-0.00009	mg/L	0.000064	-0.00009	mg/L	0.000064	71.13%
Fe 273.955†	31.4	0.02484	mg/L	0.001389	0.02484	mg/L	0.001389	5.59%
K 766.490†	23.9	0.01377	mg/L	0.028048	0.01377	mg/L	0.028048	203.74%
Mg 279.077†	13.1	0.01063	mg/L	0.008268	0.01063	mg/L	0.008268	77.76%
Mn 257.610†	39.9	0.00117	mg/L	0.000020	0.00117	mg/L	0.000020	1.67%
Mo 202.031†	11.5	0.00063	mg/L	0.000105	0.00063	mg/L	0.000105	16.64%
Na 589.592†	91.8	0.00872	mg/L	0.002308	0.00872	mg/L	0.002308	26.47%
Na 330.237†	-11.9	-0.4516	mg/L	0.28247	-0.4516	mg/L	0.28247	62.55%
Ni 231.604†	6.5	0.00178	mg/L	0.000849	0.00178	mg/L	0.000849	47.68%
Pb 220.353†	10.5	0.00141	mg/L	0.000221	0.00141	mg/L	0.000221	15.70%
Sb 206.836†	4.3	0.00146	mg/L	0.000804	0.00146	mg/L	0.000804	54.98%
Se 196.026†	-7.9	-0.00604	mg/L	0.003530	-0.00604	mg/L	0.003530	58.44%
Si 288.158†	3.4	0.00186	mg/L	0.002827	0.00186	mg/L	0.002827	152.13%
Sn 189.927†	4.4	0.00128	mg/L	0.000072	0.00128	mg/L	0.000072	5.63%
Sr 421.552†	201.3	0.00027	mg/L	0.000047	0.00027	mg/L	0.000047	17.63%
Ti 334.903†	11.1	0.00062	mg/L	0.000638	0.00062	mg/L	0.000638	103.06%
Tl 190.801†	2.1	0.00094	mg/L	0.002533	0.00094	mg/L	0.002533	270.27%
V 292.402†	34.4	0.00031	mg/L	0.000226	0.00031	mg/L	0.000226	73.12%
Zn 206.200†	0.8	0.00023	mg/L	0.000506	0.00023	mg/L	0.000506	218.05%

User canceled analysis.

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Analysis Begun

Start Time: 11/26/2012 3:08:44 PM **Plasma On Time: 11/26/2012 8:17:31 AM**
Logged In Analyst: Metals **Technique: ICP Continuous**
Spectrometer: Optima 7300 DV, S/N 077C8121202 **Autosampler: ESI**

Sample Information File: C:\pe\metals\Sample Information\1126.sif
Batch ID:
Results Data Set: I2121126
Results Library: C:\Documents and Settings\All Users\PerkinElmer\ICP\Data\Results\Results.mdb

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Sequence No.: 33 **Autosampler Location: 1**
Sample ID: CB 4 **Date Collected: 11/26/2012 3:08:45 PM**
Analyst: BA **Data Type: Original**
Dilution: 1.000000X

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2428895.3	103.5	%	0.49				0.47%
ScR 361.383	296885.0	101.6	%	1.62				1.60%
Ag 328.068†	5.8	0.00004	mg/L	0.000168	0.00004	mg/L	0.000168	468.19%
Al 308.215†	18.5	0.01227	mg/L	0.002165	0.01227	mg/L	0.002165	17.65%
As 188.979†	2.4	0.00146	mg/L	0.000838	0.00146	mg/L	0.000838	57.26%
B 249.677†	-7.9	-0.00118	mg/L	0.000527	-0.00118	mg/L	0.000527	44.84%
Ba 233.527†	-1.0	-0.00025	mg/L	0.001555	-0.00025	mg/L	0.001555	632.78%
Be 313.042†	29.7	0.00006	mg/L	0.000038	0.00006	mg/L	0.000038	67.60%
Ca 317.933†	62.4	0.00512	mg/L	0.000746	0.00512	mg/L	0.000746	14.56%
Cd 228.802†	0.4	0.00001	mg/L	0.000096	0.00001	mg/L	0.000096	>999.9%
Co 228.616†	3.9	0.00011	mg/L	0.000068	0.00011	mg/L	0.000068	59.52%
Cr 267.716†	-1.6	-0.00028	mg/L	0.000892	-0.00028	mg/L	0.000892	313.72%
Cu 324.752†	-100.2	-0.00043	mg/L	0.000074	-0.00043	mg/L	0.000074	16.99%
Fe 273.955†	23.8	0.01882	mg/L	0.003071	0.01882	mg/L	0.003071	16.32%
K 766.490†	53.6	0.03082	mg/L	0.009822	0.03082	mg/L	0.009822	31.87%
Mg 279.077†	9.2	0.00751	mg/L	0.001784	0.00751	mg/L	0.001784	23.76%
Mn 257.610†	32.2	0.00094	mg/L	0.000083	0.00094	mg/L	0.000083	8.75%
Mo 202.031†	-3.8	-0.00021	mg/L	0.000052	-0.00021	mg/L	0.000052	24.44%
Na 589.592†	24.9	0.00237	mg/L	0.001117	0.00237	mg/L	0.001117	47.17%
Na 330.237†	-12.5	-0.4710	mg/L	0.50365	-0.4710	mg/L	0.50365	106.93%
Ni 231.604†	5.1	0.00138	mg/L	0.002007	0.00138	mg/L	0.002007	145.75%
Pb 220.353†	7.7	0.00104	mg/L	0.000801	0.00104	mg/L	0.000801	77.34%
Sb 206.836†	1.9	0.00066	mg/L	0.001758	0.00066	mg/L	0.001758	266.79%
Se 196.026†	-0.2	-0.00017	mg/L	0.001707	-0.00017	mg/L	0.001707	987.45%
Si 288.158†	5.7	0.00313	mg/L	0.003613	0.00313	mg/L	0.003613	115.40%
Sn 189.927†	1.9	0.00056	mg/L	0.000352	0.00056	mg/L	0.000352	62.70%
Sr 421.552†	109.2	0.00014	mg/L	0.000045	0.00014	mg/L	0.000045	31.37%
Ti 334.903†	0.8	0.00005	mg/L	0.000305	0.00005	mg/L	0.000305	647.25%
Tl 190.801†	3.5	0.00156	mg/L	0.002398	0.00156	mg/L	0.002398	154.13%
V 292.402†	23.9	0.00021	mg/L	0.000183	0.00021	mg/L	0.000183	87.09%
Zn 206.200†	1.9	0.00056	mg/L	0.000163	0.00056	mg/L	0.000163	29.20%

Sequence No.: 34
Sample ID: CRI
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 301
Date Collected: 11/26/2012 3:12:59 PM
Data Type: Original

Nebulizer Parameters: CRI

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: CRI

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2438119.2	103.8	%	0.24				0.23%
ScR 361.383	300432.0	102.8	%	1.08				1.05%
Ag 328.068†	499.3	0.00309	mg/L	0.000139	0.00309	mg/L	0.000139	4.49%
Al 308.215†	93.4	0.06191	mg/L	0.005305	0.06191	mg/L	0.005305	8.57%
As 188.979†	80.6	0.04949	mg/L	0.000434	0.04949	mg/L	0.000434	0.88%
B 249.677†	130.7	0.01944	mg/L	0.000872	0.01944	mg/L	0.000872	4.48%
Ba 233.527†	17.1	0.00401	mg/L	0.000642	0.00401	mg/L	0.000642	16.00%
Be 313.042†	554.6	0.00105	mg/L	0.000042	0.00105	mg/L	0.000042	4.03%
Ca 317.933†	626.9	0.05146	mg/L	0.000728	0.05146	mg/L	0.000728	1.41%
Cd 228.802†	63.5	0.00212	mg/L	0.000106	0.00212	mg/L	0.000106	4.98%
Co 228.616†	125.9	0.00368	mg/L	0.000093	0.00368	mg/L	0.000093	2.54%
Cr 267.716†	27.7	0.00489	mg/L	0.000738	0.00489	mg/L	0.000738	15.09%
Cu 324.752†	353.9	0.00154	mg/L	0.000116	0.00154	mg/L	0.000116	7.58%
Fe 273.955†	78.5	0.06204	mg/L	0.002004	0.06204	mg/L	0.002004	3.23%
K 766.490†	866.8	0.4989	mg/L	0.03230	0.4989	mg/L	0.03230	6.48%
Mg 279.077†	65.8	0.05360	mg/L	0.003041	0.05360	mg/L	0.003041	5.67%
Mn 257.610†	56.7	0.00166	mg/L	0.000111	0.00166	mg/L	0.000111	6.68%
Mo 202.031†	87.2	0.00481	mg/L	0.000642	0.00481	mg/L	0.000642	13.34%
Na 589.592†	5299.1	0.5031	mg/L	0.00189	0.5031	mg/L	0.00189	0.38%
Na 330.237†	14.9	0.5616	mg/L	0.16885	0.5616	mg/L	0.16885	30.06%
Ni 231.604†	43.5	0.01186	mg/L	0.000981	0.01186	mg/L	0.000981	8.27%
Pb 220.353†	152.0	0.02033	mg/L	0.000569	0.02033	mg/L	0.000569	2.80%
Sb 206.836†	154.0	0.05192	mg/L	0.000479	0.05192	mg/L	0.000479	0.92%
Se 196.026†	64.1	0.04896	mg/L	0.001897	0.04896	mg/L	0.001897	3.87%
Si 288.158†	127.2	0.07006	mg/L	0.005737	0.07006	mg/L	0.005737	8.19%
Sn 189.927†	37.5	0.01103	mg/L	0.000728	0.01103	mg/L	0.000728	6.60%
Sr 421.552†	844.4	0.00111	mg/L	0.000044	0.00111	mg/L	0.000044	3.96%
Ti 334.903†	116.3	0.00648	mg/L	0.000852	0.00648	mg/L	0.000852	13.16%
Tl 190.801†	114.0	0.05066	mg/L	0.001111	0.05066	mg/L	0.001111	2.19%
V 292.402†	355.3	0.00318	mg/L	0.000224	0.00318	mg/L	0.000224	7.07%
Zn 206.200†	35.8	0.01052	mg/L	0.001059	0.01052	mg/L	0.001059	10.07%

Sequence No.: 35
Sample ID: ICSA
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 302
Date Collected: 11/26/2012 3:17:15 PM
Data Type: Original

Nebulizer Parameters: ICSA

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: ICSA

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2401421.3	102.3	%	0.73				0.71%
ScR 361.383	290170.9	99.33	%	0.780				0.78%
Ag 328.068†	-165.5	-0.00102	mg/L	0.000183	-0.00102	mg/L	0.000183	17.90%
Al 308.215†	300275.3	199.5	mg/L	2.49	199.5	mg/L	2.49	1.25%
As 188.979†	36.6	0.01687	mg/L	0.001034	0.01687	mg/L	0.001034	6.13%
B 249.677†	-44.8	-0.00666	mg/L	0.001199	-0.00666	mg/L	0.001199	17.99%
Ba 233.527†	120.4	-0.00384	mg/L	0.000549	-0.00384	mg/L	0.000549	14.29%
Be 313.042†	56.7	0.00011	mg/L	0.000007	0.00011	mg/L	0.000007	6.29%
Ca 317.933†	1208845.4	99.24	mg/L	1.537	99.24	mg/L	1.537	1.55%
Cd 228.802†	50.0	-0.00010	mg/L	0.000197	-0.00010	mg/L	0.000197	195.48%
Co 228.616†	69.1	-0.00055	mg/L	0.000200	-0.00055	mg/L	0.000200	36.40%
Cr 267.716†	15.0	0.00054	mg/L	0.000444	0.00054	mg/L	0.000444	82.32%
Cu 324.752†	-1951.0	-0.00065	mg/L	0.000102	-0.00065	mg/L	0.000102	15.83%
Fe 273.955†	248877.6	196.7	mg/L	2.75	196.7	mg/L	2.75	1.40%
K 766.490†	18.6	0.01069	mg/L	0.010502	0.01069	mg/L	0.010502	98.27%
Mg 279.077†	126860.1	103.2	mg/L	0.95	103.2	mg/L	0.95	0.92%
Mn 257.610†	48.7	0.00140	mg/L	0.000154	0.00140	mg/L	0.000154	11.06%
Mo 202.031†	56.9	0.00207	mg/L	0.000230	0.00207	mg/L	0.000230	11.14%
Na 589.592†	148.5	0.01410	mg/L	0.003034	0.01410	mg/L	0.003034	21.52%
Na 330.237†	-9.1	-0.3443	mg/L	0.17409	-0.3443	mg/L	0.17409	50.57%
Ni 231.604†	2.8	0.00077	mg/L	0.001740	0.00077	mg/L	0.001740	226.91%
Pb 220.353†	-289.2	0.00102	mg/L	0.000616	0.00102	mg/L	0.000616	60.24%
Sb 206.836†	34.2	0.01134	mg/L	0.002289	0.01134	mg/L	0.002289	20.19%
Se 196.026†	4.6	0.00350	mg/L	0.003439	0.00350	mg/L	0.003439	98.36%
Si 288.158†	-20.3	0.00131	mg/L	0.003220	0.00131	mg/L	0.003220	246.01%
Sn 189.927†	-66.7	-0.00728	mg/L	0.000506	-0.00728	mg/L	0.000506	6.95%
Sr 421.552†	3199.6	0.00421	mg/L	0.000041	0.00421	mg/L	0.000041	0.97%
Ti 334.903†	143.2	0.00325	mg/L	0.000708	0.00325	mg/L	0.000708	21.81%
Tl 190.801†	-47.9	-0.00028	mg/L	0.004975	-0.00028	mg/L	0.004975	>999.9%
V 292.402†	1180.7	0.00362	mg/L	0.000203	0.00362	mg/L	0.000203	5.60%
Zn 206.200†	11.1	0.00327	mg/L	0.001588	0.00327	mg/L	0.001588	48.57%

Sequence No.: 36
Sample ID: ICSAB
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 303
Date Collected: 11/26/2012 3:21:31 PM
Data Type: Original

Nebulizer Parameters: ICSAB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: ICSAB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2395726.6	102.0	%	0.30				0.29%
ScR 361.383	293147.8	100.4	%	2.38				2.37%
Ag 328.068†	161675.4	1.002	mg/L	0.0025	1.002	mg/L	0.0025	0.25%
Al 308.215†	297141.4	197.4	mg/L	5.35	197.4	mg/L	5.35	2.71%
As 188.979†	1657.1	1.008	mg/L	0.0071	1.008	mg/L	0.0071	0.70%
B 249.677†	-25.1	-0.00576	mg/L	0.000099	-0.00576	mg/L	0.000099	1.73%
Ba 233.527†	4342.9	0.9913	mg/L	0.02281	0.9913	mg/L	0.02281	2.30%
Be 313.042†	541114.7	1.024	mg/L	0.0244	1.024	mg/L	0.0244	2.38%
Ca 317.933†	1210385.8	99.36	mg/L	2.470	99.36	mg/L	2.470	2.49%
Cd 228.802†	26843.4	1.023	mg/L	0.0019	1.023	mg/L	0.0019	0.18%
Co 228.616†	33658.0	0.9842	mg/L	0.00316	0.9842	mg/L	0.00316	0.32%
Cr 267.716†	5728.3	1.011	mg/L	0.0247	1.011	mg/L	0.0247	2.44%
Cu 324.752†	235594.9	1.031	mg/L	0.0025	1.031	mg/L	0.0025	0.24%
Fe 273.955†	248523.9	196.5	mg/L	5.63	196.5	mg/L	5.63	2.87%
K 766.490†	-60.8	-0.03500	mg/L	0.016157	-0.03500	mg/L	0.016157	46.16%
Mg 279.077†	121396.4	98.77	mg/L	2.535	98.77	mg/L	2.535	2.57%
Mn 257.610†	33110.4	0.9697	mg/L	0.02524	0.9697	mg/L	0.02524	2.60%
Mo 202.031†	57.5	0.00204	mg/L	0.000387	0.00204	mg/L	0.000387	18.94%
Na 589.592†	290.5	0.02759	mg/L	0.001110	0.02759	mg/L	0.001110	4.03%
Na 330.237†	0.3	-0.3090	mg/L	0.09197	-0.3090	mg/L	0.09197	29.77%
Ni 231.604†	3633.0	0.9893	mg/L	0.02273	0.9893	mg/L	0.02273	2.30%
Pb 220.353†	6883.3	0.9594	mg/L	0.00272	0.9594	mg/L	0.00272	0.28%
Sb 206.836†	3092.3	1.031	mg/L	0.0058	1.031	mg/L	0.0058	0.56%
Se 196.026†	1288.6	0.9837	mg/L	0.00383	0.9837	mg/L	0.00383	0.39%
Si 288.158†	-24.6	0.00212	mg/L	0.001894	0.00212	mg/L	0.001894	89.39%
Sn 189.927†	-66.7	-0.00675	mg/L	0.000410	-0.00675	mg/L	0.000410	6.08%
Sr 421.552†	3199.1	0.00421	mg/L	0.000165	0.00421	mg/L	0.000165	3.92%
Ti 334.903†	141.8	0.00296	mg/L	0.000493	0.00296	mg/L	0.000493	16.67%
Tl 190.801†	2053.3	0.9244	mg/L	0.00314	0.9244	mg/L	0.00314	0.34%
V 292.402†	109856.1	0.9736	mg/L	0.00341	0.9736	mg/L	0.00341	0.35%
Zn 206.200†	3343.7	0.9824	mg/L	0.02312	0.9824	mg/L	0.02312	2.35%

Conf.

Sequence No.: 37
Sample ID: CV 4
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 11/26/2012 3:25:19 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2412673.8	102.8	%	0.34				0.33%
ScR 361.383	293700.2	100.5	%	2.12				2.11%
Ag 328.068†	169395.0	1.050	mg/L	0.0069	1.050	mg/L	0.0069	0.66%
Al 308.215†	3171.3	2.072	mg/L	0.0514	2.072	mg/L	0.0514	2.48%
As 188.979†	3352.8	2.078	mg/L	0.0025	2.078	mg/L	0.0025	0.12%
B 249.677†	6877.5	1.022	mg/L	0.0275	1.022	mg/L	0.0275	2.69%
Ba 233.527†	4317.8	1.017	mg/L	0.0272	1.017	mg/L	0.0272	2.67%
Be 313.042†	537392.9	1.017	mg/L	0.0303	1.017	mg/L	0.0303	2.98%
Ca 317.933†	24154.7	1.983	mg/L	0.0573	1.983	mg/L	0.0573	2.89%
Cd 228.802†	27924.9	1.060	mg/L	0.0096	1.060	mg/L	0.0096	0.91%
Co 228.616†	35275.0	1.032	mg/L	0.0084	1.032	mg/L	0.0084	0.81%
Cr 267.716†	5795.2	1.025	mg/L	0.0275	1.025	mg/L	0.0275	2.68%
Cu 324.752†	243347.1	1.056	mg/L	0.0076	1.056	mg/L	0.0076	0.72%
Fe 273.955†	2687.9	2.117	mg/L	0.0490	2.117	mg/L	0.0490	2.31%
K 766.490†	35119.6	20.21	mg/L	0.460	20.21	mg/L	0.460	2.28%
Mg 279.077†	2535.3	2.072	mg/L	0.0505	2.072	mg/L	0.0505	2.44%
Mn 257.610†	33823.0	0.9908	mg/L	0.02883	0.9908	mg/L	0.02883	2.91%
Mo 202.031†	18860.5	1.040	mg/L	0.0088	1.040	mg/L	0.0088	0.84%
Na 589.592†	551087.6	52.33	mg/L	1.404	52.33	mg/L	1.404	2.68%
Na 330.237†	1396.4	52.68	mg/L	1.088	52.68	mg/L	1.088	2.07%
Ni 231.604†	3801.2	1.035	mg/L	0.0279	1.035	mg/L	0.0279	2.69%
Pb 220.353†	15028.0	2.009	mg/L	0.0153	2.009	mg/L	0.0153	0.76%
Sb 206.836†	6560.0	2.210	mg/L	0.0029	2.210	mg/L	0.0029	0.13%
Se 196.026†	2662.6	2.033	mg/L	0.0038	2.033	mg/L	0.0038	0.19%
Si 288.158†	3997.0	2.202	mg/L	0.0570	2.202	mg/L	0.0570	2.59%
Sn 189.927†	3614.7	1.061	mg/L	0.0004	1.061	mg/L	0.0004	0.04%
Sr 421.552†	782846.0	1.031	mg/L	0.0290	1.031	mg/L	0.0290	2.82%
Ti 334.903†	19236.2	1.071	mg/L	0.0319	1.071	mg/L	0.0319	2.98%
Tl 190.801†	4586.3	2.030	mg/L	0.0058	2.030	mg/L	0.0058	0.29%
V 292.402†	117771.1	1.051	mg/L	0.0059	1.051	mg/L	0.0059	0.56%
Zn 206.200†	3651.4	1.073	mg/L	0.0305	1.073	mg/L	0.0305	2.85%

Sequence No.: 38
Sample ID: CB 5
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 11/26/2012 3:29:23 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2411701.8	102.7	%	0.25				0.24%
ScR 361.383	292897.2	100.3	%	0.79				0.79%
Ag 328.068†	4.8	0.00003	mg/L	0.000131	0.00003	mg/L	0.000131	439.99%
Al 308.215†	36.4	0.02415	mg/L	0.005336	0.02415	mg/L	0.005336	22.10%
As 188.979†	-2.7	-0.00164	mg/L	0.001909	-0.00164	mg/L	0.001909	116.70%
B 249.677†	7.6	0.00112	mg/L	0.000833	0.00112	mg/L	0.000833	74.11%
Ba 233.527†	1.9	0.00044	mg/L	0.000027	0.00044	mg/L	0.000027	6.21%
Be 313.042†	107.8	0.00020	mg/L	0.000022	0.00020	mg/L	0.000022	10.93%
Ca 317.933†	119.9	0.00984	mg/L	0.002771	0.00984	mg/L	0.002771	28.15%
Cd 228.802†	4.7	0.00019	mg/L	0.000118	0.00019	mg/L	0.000118	60.49%
Co 228.616†	13.0	0.00038	mg/L	0.000143	0.00038	mg/L	0.000143	37.89%
Cr 267.716†	3.5	0.00062	mg/L	0.000346	0.00062	mg/L	0.000346	55.63%
Cu 324.752†	-9.4	-0.00004	mg/L	0.000075	-0.00004	mg/L	0.000075	184.30%
Fe 273.955†	24.1	0.01901	mg/L	0.003288	0.01901	mg/L	0.003288	17.29%
K 766.490†	40.7	0.02344	mg/L	0.005668	0.02344	mg/L	0.005668	24.18%
Mg 279.077†	15.0	0.01223	mg/L	0.003176	0.01223	mg/L	0.003176	25.98%
Mn 257.610†	15.6	0.00046	mg/L	0.000074	0.00046	mg/L	0.000074	16.10%
Mo 202.031†	10.2	0.00056	mg/L	0.000186	0.00056	mg/L	0.000186	33.15%
Na 589.592†	87.9	0.00835	mg/L	0.004444	0.00835	mg/L	0.004444	53.23%
Na 330.237†	-2.7	-0.1018	mg/L	0.16789	-0.1018	mg/L	0.16789	164.85%
Ni 231.604†	7.9	0.00216	mg/L	0.000956	0.00216	mg/L	0.000956	44.17%
Pb 220.353†	7.1	0.00096	mg/L	0.000364	0.00096	mg/L	0.000364	38.03%
Sb 206.836†	6.4	0.00217	mg/L	0.002714	0.00217	mg/L	0.002714	124.92%
Se 196.026†	-1.4	-0.00104	mg/L	0.003837	-0.00104	mg/L	0.003837	368.23%
Si 288.158†	5.3	0.00290	mg/L	0.000981	0.00290	mg/L	0.000981	33.84%
Sn 189.927†	2.8	0.00083	mg/L	0.000988	0.00083	mg/L	0.000988	118.36%
Sr 421.552†	174.1	0.00023	mg/L	0.000029	0.00023	mg/L	0.000029	12.66%
Ti 334.903†	29.3	0.00163	mg/L	0.000341	0.00163	mg/L	0.000341	20.83%
Tl 190.801†	5.0	0.00222	mg/L	0.001898	0.00222	mg/L	0.001898	85.66%
V 292.402†	25.4	0.00023	mg/L	0.000175	0.00023	mg/L	0.000175	77.01%
Zn 206.200†	3.0	0.00087	mg/L	0.000323	0.00087	mg/L	0.000323	37.02%

Sequence No.: 39 **Autosampler Location: 326**
Sample ID: VS36 MB TWC **Date Collected: 11/26/2012 3:33:38 PM**
Analyst: BA **Data Type: Original**
Dilution: 1.000000X

Nebulizer Parameters: VS36 MB TWC

Analyte	Back Pressure	Flow
All	221.0 kPa	0.75 L/min

Mean Data: VS36 MB TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2447712.1	104.3	%	0.29				0.27%
ScR 361.383	299417.1	102.5	%	1.91				1.87%
Ag 328.068†	4.6	0.00003	mg/L	0.000102	0.00003	mg/L	0.000102	358.40%
Al 308.215†	24.7	0.01641	mg/L	0.003137	0.01641	mg/L	0.003137	19.12%
As 188.979†	4.6	0.00280	mg/L	0.001204	0.00280	mg/L	0.001204	42.94%
B 249.677†	-4.6	-0.00069	mg/L	0.000841	-0.00069	mg/L	0.000841	122.46%
Ba 233.527†	6.3	0.00149	mg/L	0.000253	0.00149	mg/L	0.000253	16.99%
Be 313.042†	37.2	0.00007	mg/L	0.000049	0.00007	mg/L	0.000049	69.81%
Ca 317.933†	161.3	0.01324	mg/L	0.000493	0.01324	mg/L	0.000493	3.72%
Cd 228.802†	0.1	-0.00001	mg/L	0.000057	-0.00001	mg/L	0.000057	404.13%
Co 228.616†	6.4	0.00019	mg/L	0.000063	0.00019	mg/L	0.000063	33.67%
Cr 267.716†	1.0	0.00017	mg/L	0.000238	0.00017	mg/L	0.000238	136.08%
Cu 324.752†	-24.6	-0.00011	mg/L	0.000020	-0.00011	mg/L	0.000020	19.20%
Fe 273.955†	19.6	0.01551	mg/L	0.000262	0.01551	mg/L	0.000262	1.69%
K 766.490†	33.2	0.01911	mg/L	0.018506	0.01911	mg/L	0.018506	96.83%
Mg 279.077†	12.7	0.01035	mg/L	0.005402	0.01035	mg/L	0.005402	52.19%
Mn 257.610†	11.5	0.00034	mg/L	0.000079	0.00034	mg/L	0.000079	23.29%
Mo 202.031†	-4.2	-0.00023	mg/L	0.000158	-0.00023	mg/L	0.000158	68.02%
Na 589.592†	94.0	0.00892	mg/L	0.002455	0.00892	mg/L	0.002455	27.51%
Na 330.237†	-0.5	-0.02024	mg/L	0.385019	-0.02024	mg/L	0.385019	>999.9%
Ni 231.604†	5.9	0.00162	mg/L	0.001208	0.00162	mg/L	0.001208	74.74%
Pb 220.353†	5.3	0.00071	mg/L	0.000874	0.00071	mg/L	0.000874	122.57%
Sb 206.836†	0.1	0.00005	mg/L	0.001541	0.00005	mg/L	0.001541	>999.9%
Se 196.026†	-1.8	-0.00135	mg/L	0.002034	-0.00135	mg/L	0.002034	150.35%
Si 288.158†	6.6	0.00361	mg/L	0.001639	0.00361	mg/L	0.001639	45.35%
Sn 189.927†	4.3	0.00128	mg/L	0.000896	0.00128	mg/L	0.000896	70.30%
Sr 421.552†	86.2	0.00011	mg/L	0.000020	0.00011	mg/L	0.000020	17.82%
Ti 334.903†	9.2	0.00051	mg/L	0.000503	0.00051	mg/L	0.000503	97.81%
Tl 190.801†	1.5	0.00069	mg/L	0.001782	0.00069	mg/L	0.001782	259.60%
V 292.402†	14.0	0.00012	mg/L	0.000201	0.00012	mg/L	0.000201	161.68%
Zn 206.200†	10.9	0.00319	mg/L	0.000124	0.00319	mg/L	0.000124	3.88%

Sequence No.: 40
Sample ID: VS36 B TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 327
Date Collected: 11/26/2012 3:37:55 PM
Data Type: Original

Nebulizer Parameters: VS36 B TWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS36 B TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2419096.0	103.0	%	0.25				0.25%
ScR 361.383	297207.1	101.7	%	1.35				1.32%
Ag 328.068†	-6.1	-0.00004	mg/L	0.000184	-0.00004	mg/L	0.000184	493.31%
Al 308.215†	174.9	0.1162	mg/L	0.00789	0.1162	mg/L	0.00789	6.79%
As 188.979†	7.0	0.00408	mg/L	0.000588	0.00408	mg/L	0.000588	14.40%
B 249.677†	42.6	0.00634	mg/L	0.000828	0.00634	mg/L	0.000828	13.06%
Ba 233.527†	34.5	0.00811	mg/L	0.000540	0.00811	mg/L	0.000540	6.66%
Be 313.042†	8.2	0.00002	mg/L	0.000031	0.00002	mg/L	0.000031	203.87%
Ca 317.933†	59869.9	4.915	mg/L	0.0805	4.915	mg/L	0.0805	1.64%
Cd 228.802†	-2.9	-0.00013	mg/L	0.000147	-0.00013	mg/L	0.000147	109.94%
Co 228.616†	7.6	0.00021	mg/L	0.000053	0.00021	mg/L	0.000053	24.79%
Cr 267.716†	10.6	0.00177	mg/L	0.001517	0.00177	mg/L	0.001517	85.78%
Cu 324.752†	1993.9	0.00866	mg/L	0.000076	0.00866	mg/L	0.000076	0.88%
Fe 273.955†	207.0	0.1636	mg/L	0.00468	0.1636	mg/L	0.00468	2.86%
K 766.490†	2163.7	1.245	mg/L	0.0531	1.245	mg/L	0.0531	4.26%
Mg 279.077†	819.8	0.6676	mg/L	0.02229	0.6676	mg/L	0.02229	3.34%
Mn 257.610†	230.0	0.00672	mg/L	0.000130	0.00672	mg/L	0.000130	1.93%
Mo 202.031†	17.5	0.00091	mg/L	0.000389	0.00091	mg/L	0.000389	42.58%
Na 589.592†	16112.0	1.530	mg/L	0.0275	1.530	mg/L	0.0275	1.80%
Na 330.237†	42.3	1.593	mg/L	0.3233	1.593	mg/L	0.3233	20.30%
Ni 231.604†	22.8	0.00621	mg/L	0.000518	0.00621	mg/L	0.000518	8.35%
Pb 220.353†	19.8	0.00266	mg/L	0.000285	0.00266	mg/L	0.000285	10.70%
Sb 206.836†	6.6	0.00217	mg/L	0.001475	0.00217	mg/L	0.001475	68.02%
Se 196.026†	-4.0	-0.00309	mg/L	0.005708	-0.00309	mg/L	0.005708	184.48%
Si 288.158†	1981.8	1.092	mg/L	0.0236	1.092	mg/L	0.0236	2.16%
Sn 189.927†	-7.8	-0.00168	mg/L	0.000346	-0.00168	mg/L	0.000346	20.54%
Sr 421.552†	21829.3	0.02876	mg/L	0.000720	0.02876	mg/L	0.000720	2.50%
Ti 334.903†	67.2	0.00351	mg/L	0.000645	0.00351	mg/L	0.000645	18.38%
Tl 190.801†	1.7	0.00077	mg/L	0.000822	0.00077	mg/L	0.000822	106.55%
V 292.402†	113.3	0.00101	mg/L	0.000084	0.00101	mg/L	0.000084	8.29%
Zn 206.200†	80.1	0.02353	mg/L	0.000343	0.02353	mg/L	0.000343	1.46%

Sequence No.: 41
Sample ID: VS36 C TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 328
Date Collected: 11/26/2012 3:42:09 PM
Data Type: Original

Nebulizer Parameters: VS36 C TWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS36 C TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2429075.3	103.5	%	0.76				0.74%
ScR 361.383	302128.3	103.4	%	1.69				1.63%
Ag 328.068†	31.5	0.00020	mg/L	0.000256	0.00020	mg/L	0.000256	131.13%
Al 308.215†	206.1	0.1369	mg/L	0.00400	0.1369	mg/L	0.00400	2.92%
As 188.979†	7.0	0.00415	mg/L	0.002151	0.00415	mg/L	0.002151	51.86%
B 249.677†	38.8	0.00578	mg/L	0.000798	0.00578	mg/L	0.000798	13.82%
Ba 233.527†	112.8	0.02652	mg/L	0.000500	0.02652	mg/L	0.000500	1.89%
Be 313.042†	45.5	0.00009	mg/L	0.000037	0.00009	mg/L	0.000037	43.34%
Ca 317.933†	59249.0	4.864	mg/L	0.1020	4.864	mg/L	0.1020	2.10%
Cd 228.802†	-1.2	-0.00008	mg/L	0.000119	-0.00008	mg/L	0.000119	152.31%
Co 228.616†	15.3	0.00043	mg/L	0.000117	0.00043	mg/L	0.000117	27.18%
Cr 267.716†	9.6	0.00161	mg/L	0.000830	0.00161	mg/L	0.000830	51.57%
Cu 324.752†	3008.6	0.01307	mg/L	0.000180	0.01307	mg/L	0.000180	1.38%
Fe 273.955†	438.4	0.3466	mg/L	0.00626	0.3466	mg/L	0.00626	1.81%
K 766.490†	1741.5	1.002	mg/L	0.0178	1.002	mg/L	0.0178	1.78%
Mg 279.077†	684.4	0.5572	mg/L	0.00620	0.5572	mg/L	0.00620	1.11%
Mn 257.610†	1623.0	0.04751	mg/L	0.000803	0.04751	mg/L	0.000803	1.69%
Mo 202.031†	20.6	0.00108	mg/L	0.000261	0.00108	mg/L	0.000261	24.03%
Na 589.592†	17427.0	1.655	mg/L	0.0331	1.655	mg/L	0.0331	2.00%
Na 330.237†	39.6	1.483	mg/L	0.2517	1.483	mg/L	0.2517	16.97%
Ni 231.604†	4.2	0.00113	mg/L	0.000351	0.00113	mg/L	0.000351	30.99%
Pb 220.353†	4.0	0.00054	mg/L	0.000685	0.00054	mg/L	0.000685	127.60%
Sb 206.836†	3.4	0.00112	mg/L	0.000334	0.00112	mg/L	0.000334	29.92%
Se 196.026†	-5.2	-0.00401	mg/L	0.003825	-0.00401	mg/L	0.003825	95.44%
Si 288.158†	1840.2	1.014	mg/L	0.0185	1.014	mg/L	0.0185	1.83%
Sn 189.927†	-8.9	-0.00199	mg/L	0.001079	-0.00199	mg/L	0.001079	54.15%
Sr 421.552†	27819.4	0.03665	mg/L	0.000770	0.03665	mg/L	0.000770	2.10%
Ti 334.903†	101.1	0.00540	mg/L	0.000162	0.00540	mg/L	0.000162	3.01%
Tl 190.801†	4.7	0.00210	mg/L	0.000188	0.00210	mg/L	0.000188	8.94%
V 292.402†	110.3	0.00098	mg/L	0.000162	0.00098	mg/L	0.000162	16.56%
Zn 206.200†	156.7	0.04605	mg/L	0.001029	0.04605	mg/L	0.001029	2.23%

Sequence No.: 42
Sample ID: VS36 D TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 329
Date Collected: 11/26/2012 3:46:08 PM
Data Type: Original

Nebulizer Parameters: VS36 D TWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS36 D TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2474849.5	105.4	%	0.12				0.11%
ScR 361.383	300523.8	102.9	%	2.79				2.71%
Ag 328.068†	-13.7	-0.00008	mg/L	0.000248	-0.00008	mg/L	0.000248	293.31%
Al 308.215†	397.0	0.2638	mg/L	0.01692	0.2638	mg/L	0.01692	6.42%
As 188.979†	16.3	0.00895	mg/L	0.002748	0.00895	mg/L	0.002748	30.71%
B 249.677†	85.8	0.01278	mg/L	0.001022	0.01278	mg/L	0.001022	8.00%
Ba 233.527†	46.5	0.01092	mg/L	0.001751	0.01092	mg/L	0.001751	16.03%
Be 313.042†	-21.8	-0.00004	mg/L	0.000081	-0.00004	mg/L	0.000081	192.99%
Ca 317.933†	265691.6	21.81	mg/L	0.790	21.81	mg/L	0.790	3.62%
Cd 228.802†	-4.0	-0.00022	mg/L	0.000137	-0.00022	mg/L	0.000137	62.59%
Co 228.616†	11.4	0.00031	mg/L	0.000108	0.00031	mg/L	0.000108	34.44%
Cr 267.716†	13.5	0.00178	mg/L	0.000353	0.00178	mg/L	0.000353	19.80%
Cu 324.752†	2128.3	0.00921	mg/L	0.000198	0.00921	mg/L	0.000198	2.15%
Fe 273.955†	241.5	0.1909	mg/L	0.00508	0.1909	mg/L	0.00508	2.66%
K 766.490†	8883.1	5.113	mg/L	0.1281	5.113	mg/L	0.1281	2.51%
Mg 279.077†	5822.3	4.742	mg/L	0.1405	4.742	mg/L	0.1405	2.96%
Mn 257.610†	1095.6	0.03202	mg/L	0.001203	0.03202	mg/L	0.001203	3.76%
Mo 202.031†	59.5	0.00305	mg/L	0.000141	0.00305	mg/L	0.000141	4.62%
Na 589.592†	40972.8	3.890	mg/L	0.1299	3.890	mg/L	0.1299	3.34%
Na 330.237†	95.3	3.600	mg/L	0.4096	3.600	mg/L	0.4096	11.38%
Ni 231.604†	9.8	0.00266	mg/L	0.000839	0.00266	mg/L	0.000839	31.59%
Pb 220.353†	-0.1	0.00004	mg/L	0.000515	0.00004	mg/L	0.000515	>999.9%
Sb 206.836†	6.2	0.00200	mg/L	0.000988	0.00200	mg/L	0.000988	49.39%
Se 196.026†	-5.9	-0.00454	mg/L	0.004651	-0.00454	mg/L	0.004651	102.35%
Si 288.158†	7063.0	3.893	mg/L	0.1228	3.893	mg/L	0.1228	3.15%
Sn 189.927†	-30.2	-0.00615	mg/L	0.001244	-0.00615	mg/L	0.001244	20.22%
Sr 421.552†	91007.7	0.1199	mg/L	0.00434	0.1199	mg/L	0.00434	3.62%
Ti 334.903†	151.4	0.00740	mg/L	0.000789	0.00740	mg/L	0.000789	10.66%
Tl 190.801†	10.3	0.00459	mg/L	0.002000	0.00459	mg/L	0.002000	43.62%
V 292.402†	228.3	0.00203	mg/L	0.000128	0.00203	mg/L	0.000128	6.27%
Zn 206.200†	38.4	0.01128	mg/L	0.000581	0.01128	mg/L	0.000581	5.15%

Sequence No.: 43 T BA 11/28/12
Sample ID: VS36 E SWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 330
Date Collected: 11/26/2012 3:50:22 PM
Data Type: Original

Nebulizer Parameters: VS36 E SWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS36 E SWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2444893.0	104.1	%	0.62				0.59%
ScR 361.383	300275.7	102.8	%	2.48				2.41%
Ag 328.068†	34.5	0.00021	mg/L	0.000167	0.00021	mg/L	0.000167	78.15%
Al 308.215†	76.4	0.05070	mg/L	0.006062	0.05070	mg/L	0.006062	11.96%
As 188.979†	18.3	0.01007	mg/L	0.001346	0.01007	mg/L	0.001346	13.36%
B 249.677†	69.1	0.01029	mg/L	0.001165	0.01029	mg/L	0.001165	11.32%
Ba 233.527†	46.1	0.01085	mg/L	0.000713	0.01085	mg/L	0.000713	6.57%
Be 313.042†	-20.4	-0.00004	mg/L	0.000026	-0.00004	mg/L	0.000026	67.14%
Ca 317.933†	258112.6	21.19	mg/L	0.537	21.19	mg/L	0.537	2.53%
Cd 228.802†	1.3	-0.00002	mg/L	0.000123	-0.00002	mg/L	0.000123	619.18%
Co 228.616†	9.0	0.00026	mg/L	0.000127	0.00026	mg/L	0.000127	49.44%
Cr 267.716†	12.1	0.00150	mg/L	0.001112	0.00150	mg/L	0.001112	74.09%
Cu 324.752†	980.0	0.00421	mg/L	0.000165	0.00421	mg/L	0.000165	3.91%
Fe 273.955†	64.0	0.05055	mg/L	0.004857	0.05055	mg/L	0.004857	9.61%
K 766.490†	4872.0	2.804	mg/L	0.0929	2.804	mg/L	0.0929	3.31%
Mg 279.077†	6221.1	5.067	mg/L	0.1588	5.067	mg/L	0.1588	3.13%
Mn 257.610†	584.0	0.01704	mg/L	0.000600	0.01704	mg/L	0.000600	3.52%
Mo 202.031†	34.9	0.00169	mg/L	0.000052	0.00169	mg/L	0.000052	3.06%
Na 589.592†	41189.7	3.911	mg/L	0.1002	3.911	mg/L	0.1002	2.56%
Na 330.237†	106.6	4.027	mg/L	0.4866	4.027	mg/L	0.4866	12.08%
Ni 231.604†	14.7	0.00399	mg/L	0.001263	0.00399	mg/L	0.001263	31.67%
Pb 220.353†	-4.4	-0.00058	mg/L	0.001406	-0.00058	mg/L	0.001406	242.04%
Sb 206.836†	-3.2	-0.00117	mg/L	0.000531	-0.00117	mg/L	0.000531	45.18%
Se 196.026†	-6.5	-0.00499	mg/L	0.003223	-0.00499	mg/L	0.003223	64.53%
Si 288.158†	7547.9	4.161	mg/L	0.1014	4.161	mg/L	0.1014	2.44%
Sn 189.927†	-28.3	-0.00568	mg/L	0.001357	-0.00568	mg/L	0.001357	23.88%
Sr 421.552†	83364.4	0.1098	mg/L	0.00286	0.1098	mg/L	0.00286	2.61%
Ti 334.903†	55.9	0.00210	mg/L	0.001198	0.00210	mg/L	0.001198	56.92%
Tl 190.801†	9.2	0.00408	mg/L	0.000894	0.00408	mg/L	0.000894	21.89%
V 292.402†	101.9	0.00091	mg/L	0.000052	0.00091	mg/L	0.000052	5.67%
Zn 206.200†	16.3	0.00478	mg/L	0.000118	0.00478	mg/L	0.000118	2.46%

Sequence No.: 44
Sample ID: VS36 F TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 331
Date Collected: 11/26/2012 3:54:36 PM
Data Type: Original

Nebulizer Parameters: VS36 F TWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS36 F TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2438874.9	103.9	%	0.66				0.64%
ScR 361.383	298610.4	102.2	%	0.30				0.29%
Ag 328.068†	5.4	0.00003	mg/L	0.000094	0.00003	mg/L	0.000094	277.69%
Al 308.215†	206.1	0.1369	mg/L	0.00262	0.1369	mg/L	0.00262	1.91%
As 188.979†	11.7	0.00661	mg/L	0.001137	0.00661	mg/L	0.001137	17.20%
B 249.677†	47.1	0.00701	mg/L	0.001412	0.00701	mg/L	0.001412	20.13%
Ba 233.527†	42.0	0.00988	mg/L	0.000710	0.00988	mg/L	0.000710	7.19%
Be 313.042†	-19.2	-0.00004	mg/L	0.000045	-0.00004	mg/L	0.000045	121.98%
Ca 317.933†	144571.6	11.87	mg/L	0.065	11.87	mg/L	0.065	0.55%
Cd 228.802†	-0.2	-0.00005	mg/L	0.000076	-0.00005	mg/L	0.000076	147.06%
Co 228.616†	11.1	0.00031	mg/L	0.000077	0.00031	mg/L	0.000077	24.61%
Cr 267.716†	11.4	0.00165	mg/L	0.000793	0.00165	mg/L	0.000793	48.02%
Cu 324.752†	4014.7	0.01741	mg/L	0.000163	0.01741	mg/L	0.000163	0.94%
Fe 273.955†	218.5	0.1727	mg/L	0.00275	0.1727	mg/L	0.00275	1.59%
K 766.490†	10035.4	5.776	mg/L	0.0472	5.776	mg/L	0.0472	0.82%
Mg 279.077†	3828.3	3.118	mg/L	0.0064	3.118	mg/L	0.0064	0.20%
Mn 257.610†	678.5	0.01983	mg/L	0.000218	0.01983	mg/L	0.000218	1.10%
Mo 202.031†	55.1	0.00291	mg/L	0.000297	0.00291	mg/L	0.000297	10.23%
Na 589.592†	34237.4	3.251	mg/L	0.0065	3.251	mg/L	0.0065	0.20%
Na 330.237†	91.3	3.448	mg/L	0.0587	3.448	mg/L	0.0587	1.70%
Ni 231.604†	17.4	0.00474	mg/L	0.001012	0.00474	mg/L	0.001012	21.36%
Pb 220.353†	0.9	0.00012	mg/L	0.000244	0.00012	mg/L	0.000244	198.83%
Sb 206.836†	9.4	0.00308	mg/L	0.001927	0.00308	mg/L	0.001927	62.57%
Se 196.026†	-3.4	-0.00256	mg/L	0.002515	-0.00256	mg/L	0.002515	98.20%
Si 288.158†	7442.4	4.102	mg/L	0.0057	4.102	mg/L	0.0057	0.14%
Sn 189.927†	-18.6	-0.00398	mg/L	0.000134	-0.00398	mg/L	0.000134	3.36%
Sr 421.552†	49645.4	0.06540	mg/L	0.000169	0.06540	mg/L	0.000169	0.26%
Ti 334.903†	92.9	0.00461	mg/L	0.000959	0.00461	mg/L	0.000959	20.82%
Tl 190.801†	6.6	0.00295	mg/L	0.000770	0.00295	mg/L	0.000770	26.09%
V 292.402†	155.1	0.00138	mg/L	0.000055	0.00138	mg/L	0.000055	3.94%
Zn 206.200†	54.2	0.01592	mg/L	0.000557	0.01592	mg/L	0.000557	3.50%

Sequence No.: 45
Sample ID: VS36 ADUP TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 332
Date Collected: 11/26/2012 3:58:51 PM
Data Type: Original

Nebulizer Parameters: VS36 ADUP TWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS36 ADUP TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2436317.0	103.8	%	0.56				0.54%
ScR 361.383	299932.5	102.7	%	0.89				0.86%
Ag 328.068†	-0.8	-0.00000	mg/L	0.000145	-0.00000	mg/L	0.000145	>999.9%
Al 308.215†	177.1	0.1177	mg/L	0.00552	0.1177	mg/L	0.00552	4.69%
As 188.979†	10.8	0.00623	mg/L	0.002222	0.00623	mg/L	0.002222	35.68%
B 249.677†	283.5	0.04219	mg/L	0.000243	0.04219	mg/L	0.000243	0.58%
Ba 233.527†	13.9	0.00324	mg/L	0.001367	0.00324	mg/L	0.001367	42.15%
Be 313.042†	-31.9	-0.00006	mg/L	0.000024	-0.00006	mg/L	0.000024	40.03%
Ca 317.933†	109495.1	8.989	mg/L	0.0885	8.989	mg/L	0.0885	0.98%
Cd 228.802†	-2.0	-0.00012	mg/L	0.000112	-0.00012	mg/L	0.000112	95.15%
Co 228.616†	5.8	0.00016	mg/L	0.000045	0.00016	mg/L	0.000045	28.85%
Cr 267.716†	11.3	0.00182	mg/L	0.000181	0.00182	mg/L	0.000181	9.96%
Cu 324.752†	933.7	0.00405	mg/L	0.000127	0.00405	mg/L	0.000127	3.15%
Fe 273.955†	164.2	0.1298	mg/L	0.00232	0.1298	mg/L	0.00232	1.79%
K 766.490†	2355.9	1.356	mg/L	0.0332	1.356	mg/L	0.0332	2.45%
Mg 279.077†	1489.7	1.213	mg/L	0.0037	1.213	mg/L	0.0037	0.30%
Mn 257.610†	93.0	0.00270	mg/L	0.000074	0.00270	mg/L	0.000074	2.76%
Mo 202.031†	18.6	0.00093	mg/L	0.000177	0.00093	mg/L	0.000177	19.10%
Na 589.592†	21129.6	2.006	mg/L	0.0217	2.006	mg/L	0.0217	1.08%
Na 330.237†	60.0	2.266	mg/L	0.1499	2.266	mg/L	0.1499	6.61%
Ni 231.604†	20.3	0.00554	mg/L	0.000580	0.00554	mg/L	0.000580	10.48%
Pb 220.353†	-2.1	-0.00026	mg/L	0.000515	-0.00026	mg/L	0.000515	200.68%
Sb 206.836†	-0.2	-0.00011	mg/L	0.000869	-0.00011	mg/L	0.000869	805.15%
Se 196.026†	-4.5	-0.00340	mg/L	0.000936	-0.00340	mg/L	0.000936	27.50%
Si 288.158†	4781.9	2.636	mg/L	0.0246	2.636	mg/L	0.0246	0.93%
Sn 189.927†	-12.4	-0.00252	mg/L	0.001182	-0.00252	mg/L	0.001182	46.91%
Sr 421.552†	29895.5	0.03938	mg/L	0.000402	0.03938	mg/L	0.000402	1.02%
Ti 334.903†	86.7	0.00440	mg/L	0.001086	0.00440	mg/L	0.001086	24.67%
Tl 190.801†	3.6	0.00159	mg/L	0.000191	0.00159	mg/L	0.000191	11.97%
V 292.402†	216.1	0.00192	mg/L	0.000141	0.00192	mg/L	0.000141	7.34%
Zn 206.200†	41.3	0.01215	mg/L	0.000946	0.01215	mg/L	0.000946	7.79%

Sequence No.: 46
Sample ID: VS36 A TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 333
Date Collected: 11/26/2012 4:03:05 PM
Data Type: Original

Nebulizer Parameters: VS36 A TWC

Analyte	Back Pressure	Flow
All	221.0 kPa	0.75 L/min

Mean Data: VS36 A TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2467435.6	105.1	%	0.52				0.49%
ScR 361.383	297118.0	101.7	%	1.83				1.80%
Ag 328.068†	-25.1	-0.00015	mg/L	0.000193	-0.00015	mg/L	0.000193	124.57%
Al 308.215†	192.3	0.1278	mg/L	0.00844	0.1278	mg/L	0.00844	6.60%
As 188.979†	12.5	0.00725	mg/L	0.001736	0.00725	mg/L	0.001736	23.95%
B 249.677†	289.2	0.04303	mg/L	0.001590	0.04303	mg/L	0.001590	3.70%
Ba 233.527†	13.7	0.00321	mg/L	0.001037	0.00321	mg/L	0.001037	32.31%
Be 313.042†	-4.7	-0.00001	mg/L	0.000035	-0.00001	mg/L	0.000035	378.96%
Ca 317.933†	109890.3	9.021	mg/L	0.2241	9.021	mg/L	0.2241	2.48%
Cd 228.802†	0.6	-0.00002	mg/L	0.000054	-0.00002	mg/L	0.000054	220.37%
Co 228.616†	8.2	0.00023	mg/L	0.000110	0.00023	mg/L	0.000110	48.13%
Cr 267.716†	6.0	0.00088	mg/L	0.000297	0.00088	mg/L	0.000297	33.78%
Cu 324.752†	934.5	0.00405	mg/L	0.000034	0.00405	mg/L	0.000034	0.85%
Fe 273.955†	169.0	0.1336	mg/L	0.00364	0.1336	mg/L	0.00364	2.72%
K 766.490†	2419.1	1.392	mg/L	0.0545	1.392	mg/L	0.0545	3.92%
Mg 279.077†	1509.9	1.230	mg/L	0.0206	1.230	mg/L	0.0206	1.68%
Mn 257.610†	105.5	0.00306	mg/L	0.000157	0.00306	mg/L	0.000157	5.12%
Mo 202.031†	20.7	0.00105	mg/L	0.000167	0.00105	mg/L	0.000167	15.96%
Na 589.592†	21401.5	2.032	mg/L	0.0472	2.032	mg/L	0.0472	2.32%
Na 330.237†	49.9	1.881	mg/L	0.1097	1.881	mg/L	0.1097	5.83%
Ni 231.604†	13.9	0.00378	mg/L	0.001447	0.00378	mg/L	0.001447	38.30%
Pb 220.353†	4.1	0.00057	mg/L	0.000394	0.00057	mg/L	0.000394	68.71%
Sb 206.836†	0.4	0.00008	mg/L	0.000514	0.00008	mg/L	0.000514	648.90%
Se 196.026†	-1.2	-0.00092	mg/L	0.001525	-0.00092	mg/L	0.001525	166.10%
Si 288.158†	4857.9	2.678	mg/L	0.0809	2.678	mg/L	0.0809	3.02%
Sn 189.927†	-13.0	-0.00269	mg/L	0.000355	-0.00269	mg/L	0.000355	13.19%
Sr 421.552†	30182.0	0.03976	mg/L	0.000869	0.03976	mg/L	0.000869	2.19%
Ti 334.903†	71.4	0.00355	mg/L	0.000858	0.00355	mg/L	0.000858	24.18%
Tl 190.801†	2.3	0.00102	mg/L	0.000873	0.00102	mg/L	0.000873	85.64%
V 292.402†	215.1	0.00191	mg/L	0.000090	0.00191	mg/L	0.000090	4.72%
Zn 206.200†	42.4	0.01247	mg/L	0.000900	0.01247	mg/L	0.000900	7.22%

Sequence No.: 47
Sample ID: VS36 ASPK TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 334
Date Collected: 11/26/2012 4:07:19 PM
Data Type: Original

Nebulizer Parameters: VS36 ASPK TWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS36 ASPK TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2489469.7	106.0	%	0.68				0.64%
ScR 361.383	303856.2	104.0	%	0.59				0.57%
Ag 328.068†	81657.6	0.5060	mg/L	0.00308	0.5060	mg/L	0.00308	0.61%
Al 308.215†	3146.7	2.079	mg/L	0.0168	2.079	mg/L	0.0168	0.81%
As 188.979†	3086.6	1.947	mg/L	0.0187	1.947	mg/L	0.0187	0.96%
B 249.677†	3633.0	0.5396	mg/L	0.00433	0.5396	mg/L	0.00433	0.80%
Ba 233.527†	8341.7	1.966	mg/L	0.0162	1.966	mg/L	0.0162	0.82%
Be 313.042†	263874.1	0.4994	mg/L	0.00246	0.4994	mg/L	0.00246	0.49%
Ca 317.933†	224835.9	18.46	mg/L	0.064	18.46	mg/L	0.064	0.35%
Cd 228.802†	13562.9	0.5089	mg/L	0.00618	0.5089	mg/L	0.00618	1.21%
Co 228.616†	16924.8	0.4920	mg/L	0.00516	0.4920	mg/L	0.00516	1.05%
Cr 267.716†	2781.2	0.4908	mg/L	0.00477	0.4908	mg/L	0.00477	0.97%
Cu 324.752†	118184.4	0.5128	mg/L	0.00400	0.5128	mg/L	0.00400	0.78%
Fe 273.955†	2620.3	2.068	mg/L	0.0162	2.068	mg/L	0.0162	0.78%
K 766.490†	19314.5	11.12	mg/L	0.048	11.12	mg/L	0.048	0.43%
Mg 279.077†	13555.6	11.04	mg/L	0.094	11.04	mg/L	0.094	0.85%
Mn 257.610†	16627.0	0.4872	mg/L	0.00422	0.4872	mg/L	0.00422	0.87%
Mo 202.031†	29.6	0.00141	mg/L	0.000261	0.00141	mg/L	0.000261	18.57%
Na 589.592†	126667.4	12.03	mg/L	0.055	12.03	mg/L	0.055	0.46%
Na 330.237†	311.0	12.06	mg/L	0.272	12.06	mg/L	0.272	2.26%
Ni 231.604†	1823.0	0.4955	mg/L	0.00500	0.4955	mg/L	0.00500	1.01%
Pb 220.353†	14062.1	1.879	mg/L	0.0248	1.879	mg/L	0.0248	1.32%
Sb 206.836†	-3.1	-0.00062	mg/L	0.000515	-0.00062	mg/L	0.000515	82.97%
Se 196.026†	2521.8	1.926	mg/L	0.0152	1.926	mg/L	0.0152	0.79%
Si 288.158†	2300.2	1.268	mg/L	0.0098	1.268	mg/L	0.0098	0.78%
Sn 189.927†	1697.7	0.5003	mg/L	0.00455	0.5003	mg/L	0.00455	0.91%
Sr 421.552†	415339.6	0.5471	mg/L	0.00190	0.5471	mg/L	0.00190	0.35%
Ti 334.903†	37114.9	2.068	mg/L	0.0072	2.068	mg/L	0.0072	0.35%
Tl 190.801†	4301.3	1.907	mg/L	0.0148	1.907	mg/L	0.0148	0.77%
V 292.402†	55712.7	0.4959	mg/L	0.00428	0.4959	mg/L	0.00428	0.86%
Zn 206.200†	1705.8	0.5012	mg/L	0.00384	0.5012	mg/L	0.00384	0.77%

Sequence No.: 48
Sample ID: VS36 MBSPK TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 335
Date Collected: 11/26/2012 4:11:19 PM
Data Type: Original

Nebulizer Parameters: VS36 MBSPK TWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VS36 MBSPK TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2502692.4	106.6	%	0.34				0.32%
ScR 361.383	298676.9	102.2	%	1.29				1.26%
Ag 328.068†	81054.5	0.5022	mg/L	0.00329	0.5022	mg/L	0.00329	0.66%
Al 308.215†	3008.0	1.987	mg/L	0.0289	1.987	mg/L	0.0289	1.45%
As 188.979†	3038.2	1.918	mg/L	0.0090	1.918	mg/L	0.0090	0.47%
B 249.677†	3414.3	0.5070	mg/L	0.00727	0.5070	mg/L	0.00727	1.43%
Ba 233.527†	8523.5	2.009	mg/L	0.0260	2.009	mg/L	0.0260	1.29%
Be 313.042†	268182.1	0.5075	mg/L	0.00929	0.5075	mg/L	0.00929	1.83%
Ca 317.933†	117610.1	9.655	mg/L	0.1701	9.655	mg/L	0.1701	1.76%
Cd 228.802†	13397.5	0.5027	mg/L	0.00346	0.5027	mg/L	0.00346	0.69%
Co 228.616†	16837.4	0.4894	mg/L	0.00316	0.4894	mg/L	0.00316	0.65%
Cr 267.716†	2846.1	0.5024	mg/L	0.00758	0.5024	mg/L	0.00758	1.51%
Cu 324.752†	116024.2	0.5034	mg/L	0.00373	0.5034	mg/L	0.00373	0.74%
Fe 273.955†	2524.9	1.993	mg/L	0.0292	1.993	mg/L	0.0292	1.47%
K 766.490†	17173.4	9.884	mg/L	0.1807	9.884	mg/L	0.1807	1.83%
Mg 279.077†	12378.4	10.08	mg/L	0.139	10.08	mg/L	0.139	1.38%
Mn 257.610†	16948.2	0.4966	mg/L	0.00738	0.4966	mg/L	0.00738	1.49%
Mo 202.031†	11.9	0.00052	mg/L	0.000174	0.00052	mg/L	0.000174	33.26%
Na 589.592†	106679.8	10.13	mg/L	0.183	10.13	mg/L	0.183	1.80%
Na 330.237†	256.4	10.01	mg/L	0.238	10.01	mg/L	0.238	2.38%
Ni 231.604†	1857.1	0.5048	mg/L	0.00689	0.5048	mg/L	0.00689	1.37%
Pb 220.353†	14014.6	1.873	mg/L	0.0133	1.873	mg/L	0.0133	0.71%
Sb 206.836†	-0.5	0.00009	mg/L	0.000526	0.00009	mg/L	0.000526	606.91%
Se 196.026†	2479.1	1.894	mg/L	0.0049	1.894	mg/L	0.0049	0.26%
Si 288.158†	12.7	0.00695	mg/L	0.003406	0.00695	mg/L	0.003406	48.98%
Sn 189.927†	1704.4	0.5012	mg/L	0.00067	0.5012	mg/L	0.00067	0.13%
Sr 421.552†	392475.8	0.5170	mg/L	0.00826	0.5170	mg/L	0.00826	1.60%
Ti 334.903†	37627.6	2.097	mg/L	0.0355	2.097	mg/L	0.0355	1.69%
Tl 190.801†	4271.7	1.894	mg/L	0.0048	1.894	mg/L	0.0048	0.25%
V 292.402†	55254.6	0.4919	mg/L	0.00293	0.4919	mg/L	0.00293	0.60%
Zn 206.200†	1712.6	0.5032	mg/L	0.00658	0.5032	mg/L	0.00658	1.31%

Sequence No.: 49
Sample ID: CV 5
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 11/26/2012 4:15:19 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2344140.3	99.85	%	0.876				0.88%
ScR 361.383	292001.4	99.96	%	2.755				2.76%
Ag 328.068†	171575.3	1.063	mg/L	0.0059	1.063	mg/L	0.0059	0.55%
Al 308.215†	3097.9	2.023	mg/L	0.0708	2.023	mg/L	0.0708	3.50%
As 188.979†	3334.0	2.066	mg/L	0.0164	2.066	mg/L	0.0164	0.79%
B 249.677†	6857.7	1.020	mg/L	0.0353	1.020	mg/L	0.0353	3.46%
Ba 233.527†	4296.9	1.012	mg/L	0.0319	1.012	mg/L	0.0319	3.16%
Be 313.042†	534635.7	1.012	mg/L	0.0330	1.012	mg/L	0.0330	3.27%
Ca 317.933†	23550.4	1.933	mg/L	0.0653	1.933	mg/L	0.0653	3.38%
Cd 228.802†	27966.9	1.062	mg/L	0.0060	1.062	mg/L	0.0060	0.56%
Co 228.616†	35146.0	1.028	mg/L	0.0043	1.028	mg/L	0.0043	0.42%
Cr 267.716†	5719.4	1.011	mg/L	0.0354	1.011	mg/L	0.0354	3.50%
Cu 324.752†	247004.8	1.072	mg/L	0.0053	1.072	mg/L	0.0053	0.50%
Fe 273.955†	2579.4	2.032	mg/L	0.0738	2.032	mg/L	0.0738	3.63%
K 766.490†	34968.5	20.13	mg/L	0.678	20.13	mg/L	0.678	3.37%
Mg 279.077†	2477.8	2.025	mg/L	0.0732	2.025	mg/L	0.0732	3.62%
Mn 257.610†	33204.0	0.9726	mg/L	0.03233	0.9726	mg/L	0.03233	3.32%
Mo 202.031†	18829.5	1.039	mg/L	0.0042	1.039	mg/L	0.0042	0.40%
Na 589.592†	550266.3	52.25	mg/L	1.744	52.25	mg/L	1.744	3.34%
Na 330.237†	1400.4	52.83	mg/L	1.598	52.83	mg/L	1.598	3.02%
Ni 231.604†	3738.4	1.018	mg/L	0.0344	1.018	mg/L	0.0344	3.37%
Pb 220.353†	14880.7	1.989	mg/L	0.0070	1.989	mg/L	0.0070	0.35%
Sb 206.836†	6579.1	2.216	mg/L	0.0201	2.216	mg/L	0.0201	0.91%
Se 196.026†	2641.6	2.017	mg/L	0.0155	2.017	mg/L	0.0155	0.77%
Si 288.158†	3957.8	2.181	mg/L	0.0763	2.181	mg/L	0.0763	3.50%
Sn 189.927†	3591.9	1.054	mg/L	0.0094	1.054	mg/L	0.0094	0.89%
Sr 421.552†	779295.4	1.027	mg/L	0.0352	1.027	mg/L	0.0352	3.43%
Ti 334.903†	19149.6	1.066	mg/L	0.0368	1.066	mg/L	0.0368	3.45%
Tl 190.801†	4599.2	2.036	mg/L	0.0169	2.036	mg/L	0.0169	0.83%
V 292.402†	118343.2	1.056	mg/L	0.0059	1.056	mg/L	0.0059	0.56%
Zn 206.200†	3554.3	1.044	mg/L	0.0322	1.044	mg/L	0.0322	3.08%

Sequence No.: 50
Sample ID: CB 6
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 11/26/2012 4:19:21 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2354927.7	100.3	%	0.60				0.60%
ScR 361.383	296053.6	101.3	%	2.41				2.38%
Ag 328.068†	-0.1	-0.00000	mg/L	0.000276	-0.00000	mg/L	0.000276	>999.9%
Al 308.215†	2.2	0.00142	mg/L	0.001952	0.00142	mg/L	0.001952	137.18%
As 188.979†	5.5	0.00338	mg/L	0.001830	0.00338	mg/L	0.001830	54.08%
B 249.677†	11.0	0.00163	mg/L	0.000666	0.00163	mg/L	0.000666	40.78%
Ba 233.527†	1.6	0.00038	mg/L	0.000855	0.00038	mg/L	0.000855	227.96%
Be 313.042†	78.6	0.00015	mg/L	0.000079	0.00015	mg/L	0.000079	53.18%
Ca 317.933†	33.0	0.00271	mg/L	0.000950	0.00271	mg/L	0.000950	35.10%
Cd 228.802†	8.8	0.00032	mg/L	0.000129	0.00032	mg/L	0.000129	40.94%
Co 228.616†	5.2	0.00015	mg/L	0.000067	0.00015	mg/L	0.000067	43.86%
Cr 267.716†	-1.3	-0.00023	mg/L	0.000903	-0.00023	mg/L	0.000903	400.29%
Cu 324.752†	42.0	0.00018	mg/L	0.000063	0.00018	mg/L	0.000063	34.72%
Fe 273.955†	0.7	0.00059	mg/L	0.002785	0.00059	mg/L	0.002785	472.56%
K 766.490†	37.2	0.02140	mg/L	0.018389	0.02140	mg/L	0.018389	85.94%
Mg 279.077†	2.3	0.00187	mg/L	0.003403	0.00187	mg/L	0.003403	181.65%
Mn 257.610†	4.6	0.00013	mg/L	0.000016	0.00013	mg/L	0.000016	11.59%
Mo 202.031†	13.7	0.00075	mg/L	0.000134	0.00075	mg/L	0.000134	17.79%
Na 589.592†	80.0	0.00760	mg/L	0.002187	0.00760	mg/L	0.002187	28.79%
Na 330.237†	-2.5	-0.09631	mg/L	0.284419	-0.09631	mg/L	0.284419	295.31%
Ni 231.604†	4.3	0.00116	mg/L	0.001881	0.00116	mg/L	0.001881	161.93%
Pb 220.353†	9.3	0.00124	mg/L	0.000549	0.00124	mg/L	0.000549	44.11%
Sb 206.836†	8.9	0.00303	mg/L	0.000560	0.00303	mg/L	0.000560	18.49%
Se 196.026†	-1.2	-0.00093	mg/L	0.001984	-0.00093	mg/L	0.001984	213.96%
Si 288.158†	9.0	0.00492	mg/L	0.002690	0.00492	mg/L	0.002690	54.65%
Sn 189.927†	8.0	0.00236	mg/L	0.000537	0.00236	mg/L	0.000537	22.74%
Sr 421.552†	162.4	0.00021	mg/L	0.000022	0.00021	mg/L	0.000022	10.34%
Ti 334.903†	5.6	0.00031	mg/L	0.000649	0.00031	mg/L	0.000649	207.19%
Tl 190.801†	-3.4	-0.00151	mg/L	0.001057	-0.00151	mg/L	0.001057	70.10%
V 292.402†	13.9	0.00012	mg/L	0.000074	0.00012	mg/L	0.000074	60.21%
Zn 206.200†	3.5	0.00103	mg/L	0.000745	0.00103	mg/L	0.000745	72.58%

Sequence No.: 51
Sample ID: VS36 G TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 336
Date Collected: 11/26/2012 4:23:36 PM
Data Type: Original

Nebulizer Parameters: VS36 G TWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS36 G TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2512055.3	107.0	%	0.30				0.28%
ScR 361.383	302939.1	103.7	%	0.61				0.58%
Ag 328.068†	2.2	0.00001	mg/L	0.000177	0.00001	mg/L	0.000177	>999.9%
Al 308.215†	246.7	0.1639	mg/L	0.00224	0.1639	mg/L	0.00224	1.37%
As 188.979†	13.0	0.00758	mg/L	0.001623	0.00758	mg/L	0.001623	21.42%
B 249.677†	36.5	0.00543	mg/L	0.000124	0.00543	mg/L	0.000124	2.29%
Ba 233.527†	37.2	0.00874	mg/L	0.000357	0.00874	mg/L	0.000357	4.08%
Be 313.042†	-4.6	-0.00001	mg/L	0.000014	-0.00001	mg/L	0.000014	159.60%
Ca 317.933†	123183.7	10.11	mg/L	0.069	10.11	mg/L	0.069	0.69%
Cd 228.802†	-0.2	-0.00006	mg/L	0.000088	-0.00006	mg/L	0.000088	155.42%
Co 228.616†	13.8	0.00039	mg/L	0.000047	0.00039	mg/L	0.000047	12.04%
Cr 267.716†	11.5	0.00180	mg/L	0.000377	0.00180	mg/L	0.000377	20.93%
Cu 324.752†	1109.2	0.00481	mg/L	0.000226	0.00481	mg/L	0.000226	4.70%
Fe 273.955†	166.5	0.1316	mg/L	0.00248	0.1316	mg/L	0.00248	1.88%
K 766.490†	9210.2	5.301	mg/L	0.0730	5.301	mg/L	0.0730	1.38%
Mg 279.077†	2106.9	1.716	mg/L	0.0276	1.716	mg/L	0.0276	1.61%
Mn 257.610†	190.0	0.00553	mg/L	0.000068	0.00553	mg/L	0.000068	1.22%
Mo 202.031†	19.1	0.00095	mg/L	0.000041	0.00095	mg/L	0.000041	4.35%
Na 589.592†	17957.8	1.705	mg/L	0.0122	1.705	mg/L	0.0122	0.71%
Na 330.237†	51.8	1.960	mg/L	0.3801	1.960	mg/L	0.3801	19.39%
Ni 231.604†	24.8	0.00676	mg/L	0.001651	0.00676	mg/L	0.001651	24.44%
Pb 220.353†	1.4	0.00021	mg/L	0.000861	0.00021	mg/L	0.000861	403.51%
Sb 206.836†	8.9	0.00294	mg/L	0.001588	0.00294	mg/L	0.001588	54.05%
Se 196.026†	-5.3	-0.00405	mg/L	0.003253	-0.00405	mg/L	0.003253	80.28%
Si 288.158†	5111.9	2.818	mg/L	0.0435	2.818	mg/L	0.0435	1.54%
Sn 189.927†	-14.2	-0.00291	mg/L	0.000128	-0.00291	mg/L	0.000128	4.41%
Sr 421.552†	42773.2	0.05635	mg/L	0.000422	0.05635	mg/L	0.000422	0.75%
Ti 334.903†	124.4	0.00645	mg/L	0.000674	0.00645	mg/L	0.000674	10.45%
Tl 190.801†	4.3	0.00192	mg/L	0.000210	0.00192	mg/L	0.000210	10.93%
V 292.402†	98.3	0.00088	mg/L	0.000053	0.00088	mg/L	0.000053	6.03%
Zn 206.200†	19.2	0.00564	mg/L	0.000492	0.00564	mg/L	0.000492	8.72%

Sequence No.: 52
Sample ID: VS36 H TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 337
Date Collected: 11/26/2012 4:27:52 PM
Data Type: Original

Nebulizer Parameters: VS36 H TWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS36 H TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2457379.5	104.7	%	0.36				0.35%
ScR 361.383	307123.1	105.1	%	1.82				1.73%
Ag 328.068†	16.3	0.00010	mg/L	0.000215	0.00010	mg/L	0.000215	211.83%
Al 308.215†	79.2	0.05256	mg/L	0.002408	0.05256	mg/L	0.002408	4.58%
As 188.979†	19.3	0.01094	mg/L	0.001120	0.01094	mg/L	0.001120	10.24%
B 249.677†	53.4	0.00795	mg/L	0.000851	0.00795	mg/L	0.000851	10.71%
Ba 233.527†	46.1	0.01086	mg/L	0.000629	0.01086	mg/L	0.000629	5.80%
Be 313.042†	-6.7	-0.00001	mg/L	0.000026	-0.00001	mg/L	0.000026	202.48%
Ca 317.933†	201989.5	16.58	mg/L	0.414	16.58	mg/L	0.414	2.50%
Cd 228.802†	3.0	0.00004	mg/L	0.000124	0.00004	mg/L	0.000124	305.66%
Co 228.616†	6.6	0.00018	mg/L	0.000126	0.00018	mg/L	0.000126	68.50%
Cr 267.716†	15.7	0.00228	mg/L	0.001807	0.00228	mg/L	0.001807	79.36%
Cu 324.752†	777.7	0.00335	mg/L	0.000150	0.00335	mg/L	0.000150	4.48%
Fe 273.955†	123.2	0.09742	mg/L	0.000534	0.09742	mg/L	0.000534	0.55%
K 766.490†	10690.2	6.153	mg/L	0.1353	6.153	mg/L	0.1353	2.20%
Mg 279.077†	4970.3	4.048	mg/L	0.0916	4.048	mg/L	0.0916	2.26%
Mn 257.610†	1650.5	0.04828	mg/L	0.000832	0.04828	mg/L	0.000832	1.72%
Mo 202.031†	33.1	0.00164	mg/L	0.000166	0.00164	mg/L	0.000166	10.09%
Na 589.592†	30761.3	2.921	mg/L	0.0687	2.921	mg/L	0.0687	2.35%
Na 330.237†	77.7	2.937	mg/L	0.2323	2.937	mg/L	0.2323	7.91%
Ni 231.604†	13.4	0.00363	mg/L	0.000960	0.00363	mg/L	0.000960	26.42%
Pb 220.353†	1.1	0.00015	mg/L	0.000730	0.00015	mg/L	0.000730	479.60%
Sb 206.836†	-1.7	-0.00068	mg/L	0.001215	-0.00068	mg/L	0.001215	177.49%
Se 196.026†	-11.9	-0.00911	mg/L	0.004439	-0.00911	mg/L	0.004439	48.70%
Si 288.158†	7175.1	3.955	mg/L	0.0631	3.955	mg/L	0.0631	1.60%
Sn 189.927†	-23.1	-0.00472	mg/L	0.000945	-0.00472	mg/L	0.000945	20.01%
Sr 421.552†	68426.6	0.09014	mg/L	0.002321	0.09014	mg/L	0.002321	2.58%
Ti 334.903†	71.3	0.00318	mg/L	0.000606	0.00318	mg/L	0.000606	19.07%
Tl 190.801†	5.5	0.00246	mg/L	0.001384	0.00246	mg/L	0.001384	56.30%
V 292.402†	95.3	0.00086	mg/L	0.000235	0.00086	mg/L	0.000235	27.29%
Zn 206.200†	10.7	0.00315	mg/L	0.001035	0.00315	mg/L	0.001035	32.85%

Sequence No.: 53
Sample ID: VS36 I TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 338
Date Collected: 11/26/2012 4:32:06 PM
Data Type: Original

Nebulizer Parameters: VS36 I TWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VS36 I TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2383439.0	101.5	%	0.47				0.47%
ScR 361.383	289954.6	99.26	%	1.225				1.23%
Ag 328.068†	-9.1	-0.00006	mg/L	0.000248	-0.00006	mg/L	0.000248	441.79%
Al 308.215†	101.1	0.06710	mg/L	0.001834	0.06710	mg/L	0.001834	2.73%
As 188.979†	16.7	0.00939	mg/L	0.001430	0.00939	mg/L	0.001430	15.23%
B 249.677†	55.6	0.00827	mg/L	0.000877	0.00827	mg/L	0.000877	10.59%
Ba 233.527†	94.0	0.02215	mg/L	0.002085	0.02215	mg/L	0.002085	9.41%
Be 313.042†	27.5	0.00005	mg/L	0.000084	0.00005	mg/L	0.000084	161.82%
Ca 317.933†	186599.0	15.32	mg/L	0.238	15.32	mg/L	0.238	1.56%
Cd 228.802†	-1.0	-0.00010	mg/L	0.000178	-0.00010	mg/L	0.000178	174.91%
Co 228.616†	8.1	0.00023	mg/L	0.000126	0.00023	mg/L	0.000126	54.72%
Cr 267.716†	8.6	0.00079	mg/L	0.000773	0.00079	mg/L	0.000773	97.49%
Cu 324.752†	1511.8	0.00651	mg/L	0.000143	0.00651	mg/L	0.000143	2.20%
Fe 273.955†	94.6	0.07478	mg/L	0.001251	0.07478	mg/L	0.001251	1.67%
K 766.490†	10525.1	6.058	mg/L	0.1511	6.058	mg/L	0.1511	2.49%
Mg 279.077†	8312.7	6.770	mg/L	0.2173	6.770	mg/L	0.2173	3.21%
Mn 257.610†	463.9	0.01354	mg/L	0.000130	0.01354	mg/L	0.000130	0.96%
Mo 202.031†	36.6	0.00185	mg/L	0.000305	0.00185	mg/L	0.000305	16.46%
Na 589.592†	37456.8	3.556	mg/L	0.0493	3.556	mg/L	0.0493	1.39%
Na 330.237†	83.0	3.137	mg/L	0.2544	3.137	mg/L	0.2544	8.11%
Ni 231.604†	16.0	0.00436	mg/L	0.000317	0.00436	mg/L	0.000317	7.26%
Pb 220.353†	-4.2	-0.00055	mg/L	0.000665	-0.00055	mg/L	0.000665	120.24%
Sb 206.836†	-0.6	-0.00029	mg/L	0.001062	-0.00029	mg/L	0.001062	364.06%
Se 196.026†	-5.2	-0.00398	mg/L	0.000602	-0.00398	mg/L	0.000602	15.14%
Si 288.158†	7600.3	4.190	mg/L	0.0981	4.190	mg/L	0.0981	2.34%
Sn 189.927†	-22.2	-0.00462	mg/L	0.000479	-0.00462	mg/L	0.000479	10.37%
Sr 421.552†	64888.6	0.08548	mg/L	0.001249	0.08548	mg/L	0.001249	1.46%
Ti 334.903†	56.0	0.00239	mg/L	0.000436	0.00239	mg/L	0.000436	18.25%
Tl 190.801†	1.2	0.00054	mg/L	0.000488	0.00054	mg/L	0.000488	91.05%
V 292.402†	146.2	0.00130	mg/L	0.000312	0.00130	mg/L	0.000312	23.94%
Zn 206.200†	20.6	0.00605	mg/L	0.000388	0.00605	mg/L	0.000388	6.41%

Sequence No.: 54
Sample ID: CV 6
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 11/26/2012 4:36:20 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2365815.6	100.8	%	0.43				0.43%
ScR 361.383	296383.9	101.5	%	3.38				3.34%
Ag 328.068†	170735.1	1.058	mg/L	0.0076	1.058	mg/L	0.0076	0.72%
Al 308.215†	3035.1	1.982	mg/L	0.0871	1.982	mg/L	0.0871	4.39%
As 188.979†	3302.1	2.046	mg/L	0.0039	2.046	mg/L	0.0039	0.19%
B 249.677†	6715.1	0.9983	mg/L	0.04080	0.9983	mg/L	0.04080	4.09%
Ba 233.527†	4207.9	0.9913	mg/L	0.03825	0.9913	mg/L	0.03825	3.86%
Be 313.042†	527618.0	0.9985	mg/L	0.04361	0.9985	mg/L	0.04361	4.37%
Ca 317.933†	23193.6	1.904	mg/L	0.0792	1.904	mg/L	0.0792	4.16%
Cd 228.802†	27712.9	1.052	mg/L	0.0109	1.052	mg/L	0.0109	1.04%
Co 228.616†	34943.9	1.023	mg/L	0.0105	1.023	mg/L	0.0105	1.03%
Cr 267.716†	5612.1	0.9923	mg/L	0.03878	0.9923	mg/L	0.03878	3.91%
Cu 324.752†	245259.0	1.065	mg/L	0.0093	1.065	mg/L	0.0093	0.87%
Fe 273.955†	2527.2	1.990	mg/L	0.0777	1.990	mg/L	0.0777	3.90%
K 766.490†	34383.2	19.79	mg/L	0.882	19.79	mg/L	0.882	4.46%
Mg 279.077†	2421.3	1.979	mg/L	0.0859	1.979	mg/L	0.0859	4.34%
Mn 257.610†	32717.9	0.9584	mg/L	0.04213	0.9584	mg/L	0.04213	4.40%
Mo 202.031†	18721.1	1.033	mg/L	0.0096	1.033	mg/L	0.0096	0.93%
Na 589.592†	542407.2	51.50	mg/L	2.049	51.50	mg/L	2.049	3.98%
Na 330.237†	1366.9	51.57	mg/L	1.894	51.57	mg/L	1.894	3.67%
Ni 231.604†	3671.5	0.9999	mg/L	0.04106	0.9999	mg/L	0.04106	4.11%
Pb 220.353†	14797.7	1.978	mg/L	0.0104	1.978	mg/L	0.0104	0.53%
Sb 206.836†	6515.4	2.195	mg/L	0.0065	2.195	mg/L	0.0065	0.29%
Se 196.026†	2616.6	1.998	mg/L	0.0089	1.998	mg/L	0.0089	0.44%
Si 288.158†	3895.7	2.146	mg/L	0.0892	2.146	mg/L	0.0892	4.16%
Sn 189.927†	3556.1	1.044	mg/L	0.0035	1.044	mg/L	0.0035	0.34%
Sr 421.552†	767578.8	1.011	mg/L	0.0432	1.011	mg/L	0.0432	4.28%
Ti 334.903†	18851.3	1.050	mg/L	0.0459	1.050	mg/L	0.0459	4.37%
Tl 190.801†	4560.3	2.018	mg/L	0.0089	2.018	mg/L	0.0089	0.44%
V 292.402†	117728.1	1.050	mg/L	0.0104	1.050	mg/L	0.0104	0.99%
Zn 206.200†	3489.5	1.025	mg/L	0.0408	1.025	mg/L	0.0408	3.98%

Sequence No.: 55
Sample ID: CB 7
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 11/26/2012 4:40:21 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	221.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2381085.6	101.4	%	0.57				0.56%
ScR 361.383	295021.0	101.0	%	4.13				4.08%
Ag 328.068†	71.1	0.00044	mg/L	0.000064	0.00044	mg/L	0.000064	14.46%
Al 308.215†	8.3	0.00550	mg/L	0.003786	0.00550	mg/L	0.003786	68.80%
As 188.979†	3.5	0.00212	mg/L	0.000042	0.00212	mg/L	0.000042	1.99%
B 249.677†	2.1	0.00031	mg/L	0.000630	0.00031	mg/L	0.000630	204.82%
Ba 233.527†	0.7	0.00017	mg/L	0.001340	0.00017	mg/L	0.001340	792.81%
Be 313.042†	59.0	0.00011	mg/L	0.000077	0.00011	mg/L	0.000077	68.55%
Ca 317.933†	26.1	0.00214	mg/L	0.000574	0.00214	mg/L	0.000574	26.75%
Cd 228.802†	0.1	-0.00001	mg/L	0.000225	-0.00001	mg/L	0.000225	>999.9%
Co 228.616†	2.3	0.00007	mg/L	0.000120	0.00007	mg/L	0.000120	174.87%
Cr 267.716†	3.4	0.00060	mg/L	0.000558	0.00060	mg/L	0.000558	92.39%
Cu 324.752†	10.9	0.00005	mg/L	0.000111	0.00005	mg/L	0.000111	236.37%
Fe 273.955†	1.3	0.00099	mg/L	0.001105	0.00099	mg/L	0.001105	111.72%
K 766.490†	33.9	0.01951	mg/L	0.034240	0.01951	mg/L	0.034240	175.54%
Mg 279.077†	8.0	0.00651	mg/L	0.005784	0.00651	mg/L	0.005784	88.88%
Mn 257.610†	4.7	0.00014	mg/L	0.000193	0.00014	mg/L	0.000193	140.46%
Mo 202.031†	11.9	0.00066	mg/L	0.000523	0.00066	mg/L	0.000523	79.80%
Na 589.592†	95.2	0.00904	mg/L	0.003349	0.00904	mg/L	0.003349	37.05%
Na 330.237†	3.1	0.1154	mg/L	0.60700	0.1154	mg/L	0.60700	526.17%
Ni 231.604†	6.9	0.00188	mg/L	0.000614	0.00188	mg/L	0.000614	32.74%
Pb 220.353†	6.7	0.00090	mg/L	0.000650	0.00090	mg/L	0.000650	72.48%
Sb 206.836†	8.3	0.00278	mg/L	0.001113	0.00278	mg/L	0.001113	40.06%
Se 196.026†	0.7	0.00050	mg/L	0.002666	0.00050	mg/L	0.002666	535.72%
Si 288.158†	9.7	0.00536	mg/L	0.001306	0.00536	mg/L	0.001306	24.39%
Sn 189.927†	1.8	0.00054	mg/L	0.000627	0.00054	mg/L	0.000627	116.63%
Sr 421.552†	123.7	0.00016	mg/L	0.000019	0.00016	mg/L	0.000019	11.68%
Ti 334.903†	-0.4	-0.00002	mg/L	0.000625	-0.00002	mg/L	0.000625	>999.9%
Tl 190.801†	4.2	0.00187	mg/L	0.002464	0.00187	mg/L	0.002464	131.79%
V 292.402†	5.3	0.00005	mg/L	0.000204	0.00005	mg/L	0.000204	406.58%
Zn 206.200†	1.0	0.00031	mg/L	0.000585	0.00031	mg/L	0.000585	189.91%

Sequence No.: 56
Sample ID: VR80 MB1 TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 339
Date Collected: 11/26/2012 4:44:36 PM
Data Type: Original

Nebulizer Parameters: VR80 MB1 TWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VR80 MB1 TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2384782.6	101.6	%	0.20				0.19%
ScR 361.383	293228.9	100.4	%	2.58				2.57%
Ag 328.068†	-10.8	-0.00007	mg/L	0.000542	-0.00007	mg/L	0.000542	812.45%
Al 308.215†	2.9	0.00194	mg/L	0.006882	0.00194	mg/L	0.006882	354.78%
As 188.979†	2.4	0.00144	mg/L	0.000401	0.00144	mg/L	0.000401	27.90%
B 249.677†	-1.2	-0.00018	mg/L	0.000831	-0.00018	mg/L	0.000831	469.63%
Ba 233.527†	0.2	0.00006	mg/L	0.000410	0.00006	mg/L	0.000410	706.03%
Be 313.042†	7.4	0.00001	mg/L	0.000004	0.00001	mg/L	0.000004	27.23%
Ca 317.933†	131.5	0.01079	mg/L	0.002027	0.01079	mg/L	0.002027	18.78%
Cd 228.802†	1.2	0.00004	mg/L	0.000128	0.00004	mg/L	0.000128	348.72%
Co 228.616†	4.3	0.00013	mg/L	0.000176	0.00013	mg/L	0.000176	138.27%
Cr 267.716†	3.0	0.00053	mg/L	0.000284	0.00053	mg/L	0.000284	53.22%
Cu 324.752†	10.6	0.00005	mg/L	0.000131	0.00005	mg/L	0.000131	282.55%
Fe 273.955†	0.4	0.00031	mg/L	0.002848	0.00031	mg/L	0.002848	928.50%
K 766.490†	10.6	0.00611	mg/L	0.008978	0.00611	mg/L	0.008978	146.86%
Mg 279.077†	6.3	0.00515	mg/L	0.007035	0.00515	mg/L	0.007035	136.55%
Mn 257.610†	17.6	0.00051	mg/L	0.000131	0.00051	mg/L	0.000131	25.46%
Mo 202.031†	-0.4	-0.00002	mg/L	0.000258	-0.00002	mg/L	0.000258	>999.9%
Na 589.592†	26.9	0.00256	mg/L	0.000412	0.00256	mg/L	0.000412	16.11%
Na 330.237†	-6.3	-0.2387	mg/L	0.23838	-0.2387	mg/L	0.23838	99.85%
Ni 231.604†	5.8	0.00157	mg/L	0.001274	0.00157	mg/L	0.001274	81.20%
Pb 220.353†	2.3	0.00031	mg/L	0.000440	0.00031	mg/L	0.000440	144.06%
Sb 206.836†	2.2	0.00073	mg/L	0.001396	0.00073	mg/L	0.001396	189.90%
Se 196.026†	-1.2	-0.00094	mg/L	0.004851	-0.00094	mg/L	0.004851	515.31%
Si 288.158†	17.1	0.00941	mg/L	0.001335	0.00941	mg/L	0.001335	14.18%
Sn 189.927†	4.6	0.00134	mg/L	0.000927	0.00134	mg/L	0.000927	69.36%
Sr 421.552†	27.9	0.00004	mg/L	0.000035	0.00004	mg/L	0.000035	96.15%
Ti 334.903†	-4.4	-0.00025	mg/L	0.000805	-0.00025	mg/L	0.000805	326.97%
Tl 190.801†	1.6	0.00070	mg/L	0.001393	0.00070	mg/L	0.001393	197.89%
V 292.402†	17.5	0.00016	mg/L	0.000146	0.00016	mg/L	0.000146	92.50%
Zn 206.200†	13.6	0.00401	mg/L	0.000382	0.00401	mg/L	0.000382	9.54%

Sequence No.: 57
Sample ID: VR80 B TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 340
Date Collected: 11/26/2012 4:48:51 PM
Data Type: Original

Nebulizer Parameters: VR80 B TWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VR80 B TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2370405.7	101.0	%	0.34				0.34%
ScR 361.383	295007.6	101.0	%	2.78				2.75%
Ag 328.068†	18.9	0.00012	mg/L	0.000206	0.00012	mg/L	0.000206	175.55%
Al 308.215†	167.7	0.1114	mg/L	0.00651	0.1114	mg/L	0.00651	5.84%
As 188.979†	11.3	0.00640	mg/L	0.001522	0.00640	mg/L	0.001522	23.80%
B 249.677†	123.3	0.01835	mg/L	0.000201	0.01835	mg/L	0.000201	1.10%
Ba 233.527†	38.6	0.00904	mg/L	0.000476	0.00904	mg/L	0.000476	5.27%
Be 313.042†	62.0	0.00012	mg/L	0.000068	0.00012	mg/L	0.000068	57.75%
Ca 317.933†	140286.9	11.52	mg/L	0.456	11.52	mg/L	0.456	3.96%
Cd 228.802†	8.2	0.00027	mg/L	0.000064	0.00027	mg/L	0.000064	23.81%
Co 228.616†	7.8	0.00021	mg/L	0.000138	0.00021	mg/L	0.000138	65.55%
Cr 267.716†	12.9	0.00175	mg/L	0.000666	0.00175	mg/L	0.000666	38.16%
Cu 324.752†	940.7	0.00406	mg/L	0.000063	0.00406	mg/L	0.000063	1.56%
Fe 273.955†	516.1	0.4080	mg/L	0.01529	0.4080	mg/L	0.01529	3.75%
K 766.490†	3476.3	2.001	mg/L	0.0854	2.001	mg/L	0.0854	4.27%
Mg 279.077†	6208.6	5.056	mg/L	0.1779	5.056	mg/L	0.1779	3.52%
Mn 257.610†	1158.0	0.03388	mg/L	0.001398	0.03388	mg/L	0.001398	4.13%
Mo 202.031†	22.5	0.00112	mg/L	0.000177	0.00112	mg/L	0.000177	15.87%
Na 589.592†	60490.4	5.744	mg/L	0.2129	5.744	mg/L	0.2129	3.71%
Na 330.237†	145.9	5.514	mg/L	0.2657	5.514	mg/L	0.2657	4.82%
Ni 231.604†	13.0	0.00353	mg/L	0.001308	0.00353	mg/L	0.001308	37.02%
Pb 220.353†	7.7	0.00104	mg/L	0.000934	0.00104	mg/L	0.000934	89.48%
Sb 206.836†	6.7	0.00220	mg/L	0.003410	0.00220	mg/L	0.003410	154.66%
Se 196.026†	-8.0	-0.00608	mg/L	0.003513	-0.00608	mg/L	0.003513	57.76%
Si 288.158†	10428.4	5.748	mg/L	0.1844	5.748	mg/L	0.1844	3.21%
Sn 189.927†	-15.7	-0.00317	mg/L	0.000158	-0.00317	mg/L	0.000158	4.99%
Sr 421.552†	56195.7	0.07403	mg/L	0.002853	0.07403	mg/L	0.002853	3.85%
Ti 334.903†	106.6	0.00539	mg/L	0.000229	0.00539	mg/L	0.000229	4.24%
Tl 190.801†	-0.0	0.00002	mg/L	0.002266	0.00002	mg/L	0.002266	>999.9%
V 292.402†	130.2	0.00115	mg/L	0.000113	0.00115	mg/L	0.000113	9.76%
Zn 206.200†	14.8	0.00435	mg/L	0.001031	0.00435	mg/L	0.001031	23.69%

Sequence No.: 58
Sample ID: VR80 C TWC
Analyst: BA
Dilution: 1.000000X

Del

Autosampler Location: 341
Date Collected: 11/26/2012 4:53:05 PM
Data Type: Original

Nebulizer Parameters: VR80 C TWC

Analyte	Back Pressure	Flow
All	218.0 kPa	0.75 L/min

Mean Data: VR80 C TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2372964.0	101.1	%	0.37				0.37%
ScR 361.383	294300.8	100.7	%	3.96				3.93%
Ag 328.068†	-16.9	-0.00010	mg/L	0.000140	-0.00010	mg/L	0.000140	133.79%
Al 308.215†	168.2	0.1117	mg/L	0.01212	0.1117	mg/L	0.01212	10.84%
As 188.979†	16.1	0.00935	mg/L	0.000808	0.00935	mg/L	0.000808	8.64%
B 249.677†	118.5	0.01764	mg/L	0.001652	0.01764	mg/L	0.001652	9.36%
Ba 233.527†	40.2	0.00942	mg/L	0.000811	0.00942	mg/L	0.000811	8.61%
Be 313.042†	24.7	0.00005	mg/L	0.000059	0.00005	mg/L	0.000059	126.63%
Ca 317.933†	140253.0	11.51	mg/L	0.475	11.51	mg/L	0.475	4.12%
Cd 228.802†	1.9	0.00001	mg/L	0.000235	0.00001	mg/L	0.000235	>999.9%
Co 228.616†	4.3	0.00011	mg/L	0.000038	0.00011	mg/L	0.000038	33.88%
Cr 267.716†	11.3	0.00148	mg/L	0.001014	0.00148	mg/L	0.001014	68.71%
Cu 324.752†	1059.5	0.00457	mg/L	0.000077	0.00457	mg/L	0.000077	1.69%
Fe 273.955†	512.5	0.4052	mg/L	0.01941	0.4052	mg/L	0.01941	4.79%
K 766.490†	3477.7	2.002	mg/L	0.1020	2.002	mg/L	0.1020	5.10%
Mg 279.077†	6231.7	5.075	mg/L	0.2231	5.075	mg/L	0.2231	4.40%
Mn 257.610†	1106.5	0.03237	mg/L	0.001637	0.03237	mg/L	0.001637	5.06%
Mo 202.031†	20.8	0.00102	mg/L	0.000153	0.00102	mg/L	0.000153	14.98%
Na 589.592†	60701.4	5.764	mg/L	0.2564	5.764	mg/L	0.2564	4.45%
Na 330.237†	156.1	5.900	mg/L	0.4164	5.900	mg/L	0.4164	7.06%
Ni 231.604†	14.7	0.00401	mg/L	0.001285	0.00401	mg/L	0.001285	32.01%
Pb 220.353†	0.0	0.00001	mg/L	0.000453	0.00001	mg/L	0.000453	>999.9%
Sb 206.836†	-1.1	-0.00044	mg/L	0.001237	-0.00044	mg/L	0.001237	283.79%
Se 196.026†	-10.0	-0.00768	mg/L	0.004756	-0.00768	mg/L	0.004756	61.93%
Si 288.158†	10779.4	5.942	mg/L	0.2475	5.942	mg/L	0.2475	4.17%
Sn 189.927†	-20.4	-0.00456	mg/L	0.000796	-0.00456	mg/L	0.000796	17.44%
Sr 421.552†	56311.5	0.07418	mg/L	0.003285	0.07418	mg/L	0.003285	4.43%
Ti 334.903†	91.7	0.00456	mg/L	0.000483	0.00456	mg/L	0.000483	10.60%
Tl 190.801†	0.6	0.00030	mg/L	0.001412	0.00030	mg/L	0.001412	464.38%
V 292.402†	148.8	0.00132	mg/L	0.000161	0.00132	mg/L	0.000161	12.18%
Zn 206.200†	14.7	0.00433	mg/L	0.000607	0.00433	mg/L	0.000607	14.03%

Sequence No.: 59
Sample ID: VR80 D TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 342
Date Collected: 11/26/2012 4:57:19 PM
Data Type: Original

Nebulizer Parameters: VR80 D TWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VR80 D TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2400520.4	102.2	%	0.77				0.75%
ScR 361.383	296006.8	101.3	%	1.97				1.94%
Ag 328.068†	-6.1	-0.00004	mg/L	0.000208	-0.00004	mg/L	0.000208	558.33%
Al 308.215†	69.2	0.04597	mg/L	0.007558	0.04597	mg/L	0.007558	16.44%
As 188.979†	12.3	0.00700	mg/L	0.001015	0.00700	mg/L	0.001015	14.49%
B 249.677†	104.8	0.01559	mg/L	0.001043	0.01559	mg/L	0.001043	6.69%
Ba 233.527†	28.8	0.00677	mg/L	0.000944	0.00677	mg/L	0.000944	13.95%
Be 313.042†	9.3	0.00002	mg/L	0.000078	0.00002	mg/L	0.000078	450.36%
Ca 317.933†	123952.6	10.18	mg/L	0.345	10.18	mg/L	0.345	3.39%
Cd 228.802†	1.1	-0.00001	mg/L	0.000057	-0.00001	mg/L	0.000057	985.73%
Co 228.616†	4.1	0.00011	mg/L	0.000057	0.00011	mg/L	0.000057	50.75%
Cr 267.716†	5.0	0.00043	mg/L	0.000993	0.00043	mg/L	0.000993	232.64%
Cu 324.752†	319.7	0.00136	mg/L	0.000141	0.00136	mg/L	0.000141	10.38%
Fe 273.955†	225.1	0.1779	mg/L	0.00626	0.1779	mg/L	0.00626	3.52%
K 766.490†	2312.0	1.331	mg/L	0.0389	1.331	mg/L	0.0389	2.92%
Mg 279.077†	5166.7	4.208	mg/L	0.1218	4.208	mg/L	0.1218	2.90%
Mn 257.610†	731.0	0.02138	mg/L	0.000498	0.02138	mg/L	0.000498	2.33%
Mo 202.031†	18.3	0.00090	mg/L	0.000170	0.00090	mg/L	0.000170	18.93%
Na 589.592†	54194.9	5.146	mg/L	0.1691	5.146	mg/L	0.1691	3.29%
Na 330.237†	133.5	5.047	mg/L	0.1943	5.047	mg/L	0.1943	3.85%
Ni 231.604†	9.9	0.00268	mg/L	0.000716	0.00268	mg/L	0.000716	26.69%
Pb 220.353†	-0.2	-0.00002	mg/L	0.001250	-0.00002	mg/L	0.001250	>999.9%
Sb 206.836†	-0.3	-0.00017	mg/L	0.001033	-0.00017	mg/L	0.001033	599.70%
Se 196.026†	-5.8	-0.00443	mg/L	0.003405	-0.00443	mg/L	0.003405	76.92%
Si 288.158†	6850.1	3.776	mg/L	0.1054	3.776	mg/L	0.1054	2.79%
Sn 189.927†	-17.2	-0.00378	mg/L	0.000793	-0.00378	mg/L	0.000793	20.94%
Sr 421.552†	46207.7	0.06087	mg/L	0.002020	0.06087	mg/L	0.002020	3.32%
Ti 334.903†	56.2	0.00265	mg/L	0.000641	0.00265	mg/L	0.000641	24.20%
Tl 190.801†	8.4	0.00374	mg/L	0.001282	0.00374	mg/L	0.001282	34.32%
V 292.402†	100.8	0.00089	mg/L	0.000046	0.00089	mg/L	0.000046	5.13%
Zn 206.200†	5.0	0.00146	mg/L	0.000776	0.00146	mg/L	0.000776	53.31%

Sequence No.: 60
Sample ID: VR80 ADUP TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 343
Date Collected: 11/26/2012 5:01:33 PM
Data Type: Original

Nebulizer Parameters: VR80 ADUP TWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR80 ADUP TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2467865.6	105.1	%	0.08				0.08%
ScR 361.383	295281.8	101.1	%	2.12				2.10%
Ag 328.068†	22.1	0.00014	mg/L	0.000211	0.00014	mg/L	0.000211	153.86%
Al 308.215†	285.5	0.1897	mg/L	0.00301	0.1897	mg/L	0.00301	1.59%
As 188.979†	9.2	0.00524	mg/L	0.001712	0.00524	mg/L	0.001712	32.65%
B 249.677†	126.1	0.01876	mg/L	0.001342	0.01876	mg/L	0.001342	7.15%
Ba 233.527†	46.2	0.01078	mg/L	0.001391	0.01078	mg/L	0.001391	12.89%
Be 313.042†	-2.8	-0.00001	mg/L	0.000046	-0.00001	mg/L	0.000046	809.02%
Ca 317.933†	138493.8	11.37	mg/L	0.354	11.37	mg/L	0.354	3.11%
Cd 228.802†	-2.5	-0.00013	mg/L	0.000064	-0.00013	mg/L	0.000064	47.81%
Co 228.616†	8.1	0.00021	mg/L	0.000104	0.00021	mg/L	0.000104	49.48%
Cr 267.716†	8.7	0.00101	mg/L	0.000553	0.00101	mg/L	0.000553	54.57%
Cu 324.752†	523.7	0.00225	mg/L	0.000057	0.00225	mg/L	0.000057	2.54%
Fe 273.955†	717.2	0.5670	mg/L	0.01477	0.5670	mg/L	0.01477	2.61%
K 766.490†	3922.5	2.258	mg/L	0.0488	2.258	mg/L	0.0488	2.16%
Mg 279.077†	6053.5	4.930	mg/L	0.1197	4.930	mg/L	0.1197	2.43%
Mn 257.610†	3685.9	0.1079	mg/L	0.00244	0.1079	mg/L	0.00244	2.26%
Mo 202.031†	19.8	0.00097	mg/L	0.000179	0.00097	mg/L	0.000179	18.48%
Na 589.592†	59716.3	5.670	mg/L	0.1530	5.670	mg/L	0.1530	2.70%
Na 330.237†	152.3	5.758	mg/L	0.0547	5.758	mg/L	0.0547	0.95%
Ni 231.604†	9.3	0.00253	mg/L	0.000516	0.00253	mg/L	0.000516	20.43%
Pb 220.353†	1.3	0.00020	mg/L	0.000805	0.00020	mg/L	0.000805	407.41%
Sb 206.836†	-2.5	-0.00090	mg/L	0.000839	-0.00090	mg/L	0.000839	93.24%
Se 196.026†	-3.3	-0.00253	mg/L	0.000569	-0.00253	mg/L	0.000569	22.51%
Si 288.158†	10425.1	5.746	mg/L	0.1254	5.746	mg/L	0.1254	2.18%
Sn 189.927†	-17.5	-0.00372	mg/L	0.001757	-0.00372	mg/L	0.001757	47.24%
Sr 421.552†	54880.1	0.07229	mg/L	0.002022	0.07229	mg/L	0.002022	2.80%
Ti 334.903†	176.1	0.00928	mg/L	0.000735	0.00928	mg/L	0.000735	7.92%
Tl 190.801†	8.4	0.00379	mg/L	0.001992	0.00379	mg/L	0.001992	52.55%
V 292.402†	138.7	0.00123	mg/L	0.000231	0.00123	mg/L	0.000231	18.80%
Zn 206.200†	12.9	0.00378	mg/L	0.000638	0.00378	mg/L	0.000638	16.89%

Sequence No.: 61
Sample ID: VR80 A TWC
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 344
Date Collected: 11/26/2012 5:05:47 PM
Data Type: Original

Nebulizer Parameters: VR80 A TWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR80 A TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2509628.4	106.9	%	0.25				0.24%
ScR 361.383	302380.4	103.5	%	0.46				0.44%
Ag 328.068†	-26.7	-0.00016	mg/L	0.000179	-0.00016	mg/L	0.000179	108.56%
Al 308.215†	271.8	0.1805	mg/L	0.00427	0.1805	mg/L	0.00427	2.37%
As 188.979†	11.1	0.00646	mg/L	0.002049	0.00646	mg/L	0.002049	31.74%
B 249.677†	119.1	0.01773	mg/L	0.000775	0.01773	mg/L	0.000775	4.37%
Ba 233.527†	46.2	0.01081	mg/L	0.000850	0.01081	mg/L	0.000850	7.87%
Be 313.042†	-20.5	-0.00004	mg/L	0.000037	-0.00004	mg/L	0.000037	95.64%
Ca 317.933†	135020.6	11.08	mg/L	0.130	11.08	mg/L	0.130	1.17%
Cd 228.802†	-4.2	-0.00021	mg/L	0.000082	-0.00021	mg/L	0.000082	39.06%
Co 228.616†	13.5	0.00037	mg/L	0.000211	0.00037	mg/L	0.000211	57.48%
Cr 267.716†	14.8	0.00211	mg/L	0.001262	0.00211	mg/L	0.001262	59.71%
Cu 324.752†	756.3	0.00326	mg/L	0.000022	0.00326	mg/L	0.000022	0.68%
Fe 273.955†	696.2	0.5504	mg/L	0.00572	0.5504	mg/L	0.00572	1.04%
K 766.490†	3915.4	2.253	mg/L	0.0439	2.253	mg/L	0.0439	1.95%
Mg 279.077†	5930.7	4.830	mg/L	0.1034	4.830	mg/L	0.1034	2.14%
Mn 257.610†	3620.4	0.1060	mg/L	0.00267	0.1060	mg/L	0.00267	2.52%
Mo 202.031†	16.4	0.00078	mg/L	0.000328	0.00078	mg/L	0.000328	41.79%
Na 589.592†	57832.8	5.491	mg/L	0.0476	5.491	mg/L	0.0476	0.87%
Na 330.237†	144.1	5.450	mg/L	0.5578	5.450	mg/L	0.5578	10.23%
Ni 231.604†	10.3	0.00280	mg/L	0.001581	0.00280	mg/L	0.001581	56.44%
Pb 220.353†	-1.9	-0.00024	mg/L	0.000933	-0.00024	mg/L	0.000933	389.97%
Sb 206.836†	-0.6	-0.00028	mg/L	0.001800	-0.00028	mg/L	0.001800	631.76%
Se 196.026†	-2.1	-0.00159	mg/L	0.003665	-0.00159	mg/L	0.003665	230.14%
Si 288.158†	10224.7	5.636	mg/L	0.1321	5.636	mg/L	0.1321	2.34%
Sn 189.927†	-16.5	-0.00347	mg/L	0.000927	-0.00347	mg/L	0.000927	26.74%
Sr 421.552†	53307.4	0.07022	mg/L	0.000693	0.07022	mg/L	0.000693	0.99%
Ti 334.903†	183.1	0.00968	mg/L	0.000389	0.00968	mg/L	0.000389	4.02%
Tl 190.801†	3.7	0.00170	mg/L	0.001185	0.00170	mg/L	0.001185	69.59%
V 292.402†	139.4	0.00124	mg/L	0.000066	0.00124	mg/L	0.000066	5.30%
Zn 206.200†	10.2	0.00301	mg/L	0.001255	0.00301	mg/L	0.001255	41.72%

Sequence No.: 62 **Autosampler Location: 345**
Sample ID: VR80 ASPK TWC **Date Collected: 11/26/2012 5:10:01 PM**
Analyst: BA **Data Type: Original**
Dilution: 1.000000X

Nebulizer Parameters: VR80 ASPK TWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VR80 ASPK TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2455771.6	104.6	%	0.54				0.52%
ScR 361.383	296520.3	101.5	%	1.41				1.39%
Ag 328.068†	84682.9	0.5247	mg/L	0.00248	0.5247	mg/L	0.00248	0.47%
Al 308.215†	3322.6	2.200	mg/L	0.0441	2.200	mg/L	0.0441	2.00%
As 188.979†	3294.9	2.015	mg/L	0.0064	2.015	mg/L	0.0064	0.32%
B 249.677†	124.8	0.01753	mg/L	0.001011	0.01753	mg/L	0.001011	5.77%
Ba 233.527†	8718.5	2.054	mg/L	0.0428	2.054	mg/L	0.0428	2.08%
Be 313.042†	270545.2	0.5120	mg/L	0.01263	0.5120	mg/L	0.01263	2.47%
Ca 317.933†	256127.9	21.03	mg/L	0.497	21.03	mg/L	0.497	2.36%
Cd 228.802†	13862.5	0.5195	mg/L	0.00327	0.5195	mg/L	0.00327	0.63%
Co 228.616†	17243.7	0.5053	mg/L	0.00329	0.5053	mg/L	0.00329	0.65%
Cr 267.716†	2876.9	0.5073	mg/L	0.01079	0.5073	mg/L	0.01079	2.13%
Cu 324.752†	122563.7	0.5322	mg/L	0.00352	0.5322	mg/L	0.00352	0.66%
Fe 273.955†	3230.8	2.550	mg/L	0.0560	2.550	mg/L	0.0560	2.19%
K 766.490†	21339.0	12.28	mg/L	0.230	12.28	mg/L	0.230	1.87%
Mg 279.077†	18717.5	15.24	mg/L	0.310	15.24	mg/L	0.310	2.03%
Mn 257.610†	20803.3	0.6095	mg/L	0.01257	0.6095	mg/L	0.01257	2.06%
Mo 202.031†	35.9	0.00173	mg/L	0.000233	0.00173	mg/L	0.000233	13.52%
Na 589.592†	168408.1	15.99	mg/L	0.341	15.99	mg/L	0.341	2.13%
Na 330.237†	434.3	16.25	mg/L	0.248	16.25	mg/L	0.248	1.52%
Ni 231.604†	1879.4	0.5108	mg/L	0.01200	0.5108	mg/L	0.01200	2.35%
Pb 220.353†	14396.3	1.924	mg/L	0.0117	1.924	mg/L	0.0117	0.61%
Sb 206.836†	16.5	0.00017	mg/L	0.001039	0.00017	mg/L	0.001039	603.25%
Se 196.026†	2574.7	1.967	mg/L	0.0029	1.967	mg/L	0.0029	0.15%
Si 288.158†	10573.5	5.831	mg/L	0.1000	5.831	mg/L	0.1000	1.72%
Sn 189.927†	-32.6	-0.00689	mg/L	0.001464	-0.00689	mg/L	0.001464	21.24%
Sr 421.552†	452209.3	0.5957	mg/L	0.01295	0.5957	mg/L	0.01295	2.17%
Ti 334.903†	188.2	0.00938	mg/L	0.000563	0.00938	mg/L	0.000563	6.00%
Tl 190.801†	4432.7	1.966	mg/L	0.0077	1.966	mg/L	0.0077	0.39%
V 292.402†	57475.9	0.5128	mg/L	0.00230	0.5128	mg/L	0.00230	0.45%
Zn 206.200†	1727.2	0.5075	mg/L	0.01306	0.5075	mg/L	0.01306	2.57%

Sequence No.: 63 ZZZZZZ
Sample ID: ~~VR80 APOST TWC~~
Analyst: BA
Dilution: 1.000000X

BA 11/27/12

Autosampler Location: 346
Date Collected: 11/26/2012 5:14:01 PM
Data Type: Original

Nebulizer Parameters: VR80 APOST TWC

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: VR80 APOST TWC

Analyte	Mean Corrected Intensity	Conc.	Calib. Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2403508.2	102.4	%	0.38				0.37%
ScR 361.383	295812.6	101.3	%	1.50				1.48%
Ag 328.068†	81910.6	0.5076	mg/L	0.00218	0.5076	mg/L	0.00218	0.43%
Al 308.215†	3282.6	2.174	mg/L	0.0313	2.174	mg/L	0.0313	1.44%
As 188.979†	3288.6	2.011	mg/L	0.0166	2.011	mg/L	0.0166	0.83%
B 249.677†	118.3	0.01656	mg/L	0.001442	0.01656	mg/L	0.001442	8.71%
Ba 233.527†	8628.0	2.033	mg/L	0.0291	2.033	mg/L	0.0291	1.43%
Be 313.042†	267101.7	0.5055	mg/L	0.01229	0.5055	mg/L	0.01229	2.43%
Ca 317.933†	254731.1	20.91	mg/L	0.482	20.91	mg/L	0.482	2.30%
Cd 228.802†	13912.2	0.5215	mg/L	0.00175	0.5215	mg/L	0.00175	0.34%
Co 228.616†	17321.6	0.5076	mg/L	0.00224	0.5076	mg/L	0.00224	0.44%
Cr 267.716†	2842.4	0.5012	mg/L	0.00572	0.5012	mg/L	0.00572	1.14%
Cu 324.752†	118361.2	0.5140	mg/L	0.00133	0.5140	mg/L	0.00133	0.26%
Fe 273.955†	3186.5	2.515	mg/L	0.0364	2.515	mg/L	0.0364	1.45%
K 766.490†	21105.5	12.15	mg/L	0.306	12.15	mg/L	0.306	2.52%
Mg 279.077†	18545.7	15.10	mg/L	0.219	15.10	mg/L	0.219	1.45%
Mn 257.610†	20542.3	0.6018	mg/L	0.00789	0.6018	mg/L	0.00789	1.31%
Mo 202.031†	40.1	0.00196	mg/L	0.000341	0.00196	mg/L	0.000341	17.37%
Na 589.592†	165523.7	15.72	mg/L	0.401	15.72	mg/L	0.401	2.55%
Na 330.237†	419.5	15.69	mg/L	0.220	15.69	mg/L	0.220	1.40%
Ni 231.604†	1862.6	0.5063	mg/L	0.00650	0.5063	mg/L	0.00650	1.28%
Pb 220.353†	14429.7	1.929	mg/L	0.0070	1.929	mg/L	0.0070	0.36%
Sb 206.836†	17.2	0.00055	mg/L	0.001037	0.00055	mg/L	0.001037	187.21%
Se 196.026†	2576.1	1.968	mg/L	0.0154	1.968	mg/L	0.0154	0.78%
Si 288.158†	10562.6	5.825	mg/L	0.0819	5.825	mg/L	0.0819	1.41%
Sn 189.927†	-31.1	-0.00646	mg/L	0.000631	-0.00646	mg/L	0.000631	9.78%
Sr 421.552†	445036.5	0.5863	mg/L	0.01418	0.5863	mg/L	0.01418	2.42%
Ti 334.903†	196.5	0.00985	mg/L	0.000208	0.00985	mg/L	0.000208	2.11%
Tl 190.801†	4428.9	1.964	mg/L	0.0135	1.964	mg/L	0.0135	0.69%
V 292.402†	58167.7	0.5189	mg/L	0.00279	0.5189	mg/L	0.00279	0.54%
Zn 206.200†	1709.5	0.5023	mg/L	0.00612	0.5023	mg/L	0.00612	1.22%

Sequence No.: 64 **Autosampler Location: 347**
Sample ID: VR80 MB1SPK TWC **Date Collected: 11/26/2012 5:18:02 PM**
Analyst: BA **Data Type: Original**
Dilution: 1.000000X

Nebulizer Parameters: VR80 MB1SPK TWC

Analyte	Back Pressure	Flow
All	220.0 kPa	0.75 L/min

Mean Data: VR80 MB1SPK TWC

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Std.Dev.	Sample Conc.	Sample Units	Std.Dev.	RSD
ScA 357.253	2466552.2	105.1	%	0.52				0.50%
ScR 361.383	293267.3	100.4	%	2.87				2.86%
Ag 328.068†	85519.3	0.5299	mg/L	0.00533	0.5299	mg/L	0.00533	1.01%
Al 308.215†	3089.2	2.045	mg/L	0.0612	2.045	mg/L	0.0612	2.99%
As 188.979†	3241.9	1.983	mg/L	0.0126	1.983	mg/L	0.0126	0.64%
B 249.677†	0.9	-0.00091	mg/L	0.000962	-0.00091	mg/L	0.000962	105.61%
Ba 233.527†	8788.1	2.071	mg/L	0.0665	2.071	mg/L	0.0665	3.21%
Be 313.042†	271444.0	0.5137	mg/L	0.02139	0.5137	mg/L	0.02139	4.16%
Ca 317.933†	119679.7	9.825	mg/L	0.4251	9.825	mg/L	0.4251	4.33%
Cd 228.802†	13885.6	0.5207	mg/L	0.00503	0.5207	mg/L	0.00503	0.97%
Co 228.616†	17328.3	0.5078	mg/L	0.00289	0.5078	mg/L	0.00289	0.57%
Cr 267.716†	2902.3	0.5123	mg/L	0.01569	0.5123	mg/L	0.01569	3.06%
Cu 324.752†	115476.3	0.5015	mg/L	0.00136	0.5015	mg/L	0.00136	0.27%
Fe 273.955†	2546.0	2.009	mg/L	0.0591	2.009	mg/L	0.0591	2.94%
K 766.490†	17690.6	10.18	mg/L	0.407	10.18	mg/L	0.407	4.00%
Mg 279.077†	12629.7	10.29	mg/L	0.323	10.29	mg/L	0.323	3.14%
Mn 257.610†	17139.7	0.5022	mg/L	0.01467	0.5022	mg/L	0.01467	2.92%
Mo 202.031†	8.7	0.00035	mg/L	0.000174	0.00035	mg/L	0.000174	50.43%
Na 589.592†	110161.1	10.46	mg/L	0.413	10.46	mg/L	0.413	3.95%
Na 330.237†	279.1	10.38	mg/L	0.142	10.38	mg/L	0.142	1.36%
Ni 231.604†	1900.3	0.5165	mg/L	0.01774	0.5165	mg/L	0.01774	3.43%
Pb 220.353†	14440.0	1.930	mg/L	0.0152	1.930	mg/L	0.0152	0.79%
Sb 206.836†	8.8	-0.00242	mg/L	0.002687	-0.00242	mg/L	0.002687	111.05%
Se 196.026†	2568.2	1.962	mg/L	0.0125	1.962	mg/L	0.0125	0.64%
Si 288.158†	18.2	0.01318	mg/L	0.004502	0.01318	mg/L	0.004502	34.14%
Sn 189.927†	-16.5	-0.00355	mg/L	0.001072	-0.00355	mg/L	0.001072	30.24%
Sr 421.552†	402557.3	0.5303	mg/L	0.02117	0.5303	mg/L	0.02117	3.99%
Ti 334.903†	15.2	0.00028	mg/L	0.000393	0.00028	mg/L	0.000393	141.33%
Tl 190.801†	4414.6	1.958	mg/L	0.0106	1.958	mg/L	0.0106	0.54%
V 292.402†	57860.4	0.5163	mg/L	0.00535	0.5163	mg/L	0.00535	1.04%
Zn 206.200†	1736.5	0.5103	mg/L	0.01864	0.5103	mg/L	0.01864	3.65%

Sequence No.: 65
Sample ID: CV 7 BA 11/27/12
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 7
Date Collected: 11/26/2012 5:22:02 PM
Data Type: Original

Nebulizer Parameters: CV

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CV

Analyte	Mean Corrected Intensity	Calib. Conc.	Units	Std.Dev.	Sample Conc.	Units	Std.Dev.	RSD
ScA 357.253	2332786.9	99.36	%	0.058				0.06%
ScR 361.383	291704.7	99.86	%	2.651				2.65%
Ag 328.068†	172617.5	1.070	mg/L	0.0026	1.070	mg/L	0.0026	0.24%
Al 308.215†	3076.7	2.009	mg/L	0.0680	2.009	mg/L	0.0680	3.39%
As 188.979†	3311.0	2.052	mg/L	0.0091	2.052	mg/L	0.0091	0.44%
B 249.677†	6809.3	1.012	mg/L	0.0318	1.012	mg/L	0.0318	3.14%
Ba 233.527†	4302.6	1.014	mg/L	0.0331	1.014	mg/L	0.0331	3.26%
Be 313.042†	528525.3	1.000	mg/L	0.0335	1.000	mg/L	0.0335	3.35%
Ca 317.933†	23318.4	1.914	mg/L	0.0611	1.914	mg/L	0.0611	3.19%
Cd 228.802†	27729.0	1.053	mg/L	0.0023	1.053	mg/L	0.0023	0.21%
Co 228.616†	35179.5	1.029	mg/L	0.0006	1.029	mg/L	0.0006	0.05%
Cr 267.716†	5667.7	1.002	mg/L	0.0284	1.002	mg/L	0.0284	2.84%
Cu 324.752†	247407.4	1.074	mg/L	0.0035	1.074	mg/L	0.0035	0.33%
Fe 273.955†	2518.9	1.984	mg/L	0.0593	1.984	mg/L	0.0593	2.99%
K 766.490†	34711.8	19.98	mg/L	0.703	19.98	mg/L	0.703	3.52%
Mg 279.077†	2452.1	2.004	mg/L	0.0590	2.004	mg/L	0.0590	2.94%
Mn 257.610†	32767.7	0.9598	mg/L	0.03158	0.9598	mg/L	0.03158	3.29%
Mo 202.031†	18766.8	1.035	mg/L	0.0025	1.035	mg/L	0.0025	0.25%
Na 589.592†	548405.9	52.07	mg/L	1.840	52.07	mg/L	1.840	3.53%
Na 330.237†	1385.0	52.26	mg/L	1.477	52.26	mg/L	1.477	2.83%
Ni 231.604†	3723.0	1.014	mg/L	0.0307	1.014	mg/L	0.0307	3.03%
Pb 220.353†	14819.2	1.981	mg/L	0.0051	1.981	mg/L	0.0051	0.26%
Sb 206.836†	6548.7	2.206	mg/L	0.0087	2.206	mg/L	0.0087	0.40%
Se 196.026†	2617.8	1.999	mg/L	0.0109	1.999	mg/L	0.0109	0.55%
Si 288.158†	3937.4	2.169	mg/L	0.0722	2.169	mg/L	0.0722	3.33%
Sn 189.927†	3554.6	1.044	mg/L	0.0031	1.044	mg/L	0.0031	0.30%
Sr 421.552†	774952.2	1.021	mg/L	0.0350	1.021	mg/L	0.0350	3.42%
Ti 334.903†	18960.8	1.056	mg/L	0.0344	1.056	mg/L	0.0344	3.26%
Tl 190.801†	4600.8	2.036	mg/L	0.0092	2.036	mg/L	0.0092	0.45%
V 292.402†	118605.9	1.058	mg/L	0.0039	1.058	mg/L	0.0039	0.36%
Zn 206.200†	3503.9	1.029	mg/L	0.0310	1.029	mg/L	0.0310	3.01%

Sequence No.: 66
Sample ID: CB 8
Analyst: BA
Dilution: 1.000000X

Autosampler Location: 1
Date Collected: 11/26/2012 5:26:04 PM
Data Type: Original

Nebulizer Parameters: CB

Analyte	Back Pressure	Flow
All	219.0 kPa	0.75 L/min

Mean Data: CB

Analyte	Mean Corrected Intensity	Calib. Conc.	Calib. Units	Calib. Std.Dev.	Sample Conc.	Sample Units	Sample Std.Dev.	RSD
ScA 357.253	2342152.3	99.76	%	0.454				0.45%
ScR 361.383	289995.6	99.27	%	2.744				2.76%
Ag 328.068†	14.3	0.00009	mg/L	0.000054	0.00009	mg/L	0.000054	60.17%
Al 308.215†	-5.3	-0.00355	mg/L	0.006688	-0.00355	mg/L	0.006688	188.23%
As 188.979†	4.5	0.00275	mg/L	0.001817	0.00275	mg/L	0.001817	65.94%
B 249.677†	8.8	0.00131	mg/L	0.000237	0.00131	mg/L	0.000237	18.07%
Ba 233.527†	2.6	0.00060	mg/L	0.000727	0.00060	mg/L	0.000727	120.82%
Be 313.042†	114.0	0.00022	mg/L	0.000008	0.00022	mg/L	0.000008	3.73%
Ca 317.933†	10.1	0.00083	mg/L	0.000595	0.00083	mg/L	0.000595	72.00%
Cd 228.802†	7.9	0.00029	mg/L	0.000079	0.00029	mg/L	0.000079	27.33%
Co 228.616†	2.6	0.00008	mg/L	0.000136	0.00008	mg/L	0.000136	179.73%
Cr 267.716†	2.8	0.00049	mg/L	0.000223	0.00049	mg/L	0.000223	45.45%
Cu 324.752†	73.9	0.00032	mg/L	0.000161	0.00032	mg/L	0.000161	50.36%
Fe 273.955†	-2.3	-0.00184	mg/L	0.002003	-0.00184	mg/L	0.002003	108.87%
K 766.490†	30.7	0.01768	mg/L	0.009287	0.01768	mg/L	0.009287	52.52%
Mg 279.077†	2.9	0.00234	mg/L	0.005645	0.00234	mg/L	0.005645	241.52%
Mn 257.610†	6.7	0.00020	mg/L	0.000139	0.00020	mg/L	0.000139	70.08%
Mo 202.031†	12.1	0.00067	mg/L	0.000195	0.00067	mg/L	0.000195	29.20%
Na 589.592†	71.8	0.00682	mg/L	0.001424	0.00682	mg/L	0.001424	20.88%
Na 330.237†	-4.4	-0.1650	mg/L	0.24193	-0.1650	mg/L	0.24193	146.65%
Ni 231.604†	7.1	0.00193	mg/L	0.000435	0.00193	mg/L	0.000435	22.50%
Pb 220.353†	2.6	0.00034	mg/L	0.000444	0.00034	mg/L	0.000444	129.23%
Sb 206.836†	9.9	0.00332	mg/L	0.001340	0.00332	mg/L	0.001340	40.35%
Se 196.026†	-5.9	-0.00454	mg/L	0.001875	-0.00454	mg/L	0.001875	41.33%
Si 288.158†	8.7	0.00477	mg/L	0.006843	0.00477	mg/L	0.006843	143.33%
Sn 189.927†	1.1	0.00034	mg/L	0.000899	0.00034	mg/L	0.000899	265.90%
Sr 421.552†	188.6	0.00025	mg/L	0.000019	0.00025	mg/L	0.000019	7.74%
Ti 334.903†	12.1	0.00067	mg/L	0.000360	0.00067	mg/L	0.000360	53.55%
Tl 190.801†	5.2	0.00232	mg/L	0.001164	0.00232	mg/L	0.001164	50.13%
V 292.402†	41.1	0.00037	mg/L	0.000177	0.00037	mg/L	0.000177	48.18%
Zn 206.200†	0.8	0.00022	mg/L	0.000570	0.00022	mg/L	0.000570	258.66%

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 11-27-12 **Analyst:** CL **Page:** 1 of 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD 0			2994-2
		1			2993-4
		2			↓ -5
		3			2994-7
		↓ 4			2993-6
		Rinse Sample			
		ICV			2955-7
		ICB			
		CCV1			
		CCB1			
		Low Check			
		ICSA			
		ICSAB			
		LR200			
		LR300			
		CCV2			
		CCB2			
		VS14MB1	REN	2	RR Ag, Cd, Cr, Sb, Cu
		MB2			
		MB1Spk		✓	
		MB2Spk	↓	↓ ✓	↓
	✓	VR65B	SCAN	20	RR Ag, Cd, Sb
		VT20A	REN	20	Zn
		VS14ADup	REN	2	RR Ag, Cd, Cr, Sb

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 11-27-12 **Analyst:** QL **Page:** 2 of 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		V514A	REN	2	RR Ag, Cd, Cr, Sb
		↓ A5pk	↓	↓	RR All ex. Pb, Be
		↓ B	↓	↓	↓
		CCV3			Sc, In high Cu^{63} high
		CCB3			Cr^{53}, Se^{78} high
		V514C	REN	2	RR All ex. Ba, Pb
		↓ D	↓	↓	↓
	✓	V536C		↓	RR Zn
	✓	VR63N		10	RR Mn, Pb, Zn
	✓	↓	↓	2	↓
	✓	VQ39A	RIN	5	RR Mn
	✓	VR63ADup		10	RR Mn Zn
	✓	A		↓	↓
	✓	A5pk		↓	
	✓	C			
		CCV4			Sc, Ge, In high $Ni^{60,62}$, Cu^{63} high
		CCB4			Sc, Ge, In high Ni^{62}, Se^{78} low
		STD C			
		CCV5			Ni^{60} high
		CCB5			
		VR63MDup	RIN		✓ RR x10 - Mn, Zn
		M			
		M5pk			✓ ↓
		↓ P	↓		

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 11-27-12 **Analyst:** EL **Page:** 3 **of** 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		VR63 Q	RHN		RR x10 - Mn Zn
		R			
		S			
		T			RR x10 Mn, Zn
		U			
		V			
		CCV6			
		CCB6			Ni^{62} low
		VR63W	RHN		RR x10 Mn, Zn
		X			
		VS14 E	REN	2	
		FDup			Cu - high 2RPD
		F			CAF
		FSpk			✓
		G			
		H			RR Ni x5
		I			
		J			RR Cr x5
		CCV7			
		CCB7			Cu^{63} U2, high
✓(x2)		VS44 MB	REN	2	
		VR80 MB1			Cu = 0.710
		MB2			
		VS55 MB1			

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 11-27-12 **Analyst:** QV **Page:** 4 of 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
√(x2)		V544 MB5pk	REN	2	✓
↓		VR80 MB1spk	↓	↓	✓
↓		↓ MB2spk	↓	↓	✓ Li high - RR Be
		VQ37 R	RHN		
√(x2)		V544 A	REN	2	Sc high RR As x20
↓		↓ B	↓	↓	
		CCV8			
		CCB8			End Pkg
		Rinse			
		DI			
		11-28-12			

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ~~ICP-MS~~ GFA CVA Analysis Date: 11-27-12

Elan	Analyst 11-28-12	Peer MJT 11.28.12 11.28	Comment
Logbook:			
Analyst, Date, Method info	✓	✓ ✓	
Sample ID's	✓	✓ ✓	
Standard/QC solution ID's recorded	✓	✓ ✓	
Prep codes	✓	✓ ✓	
Dilution factors	✓	✓ ✓	
Crossouts/Corrections/Deletions	✓	✓ ✓	
Calibration:			
Blank & Standard intensities	✓	✓ ✓	
Standard deviations	✓	✓ ✓	
Curve fit	✓	✓ ✓	
Calibration Verification:			
ICV/CCV	✓	✓ ✓	See log
ICB/CCB	✓	✓ ✓	See log
Samples:			
RSD's & SD's	✓	✓ ✓	See log
Internal Standards	✓	✓ ✓	See log
Carry-over	✓	✓ ✓	
Method QC:			
CRI/CRA	✓	✓ ✓	
ICSA/ICSAB	✓	✓ ✓	
Post Spikes/Serial Dilutions	—	— —	
Analytic Spikes	—	— —	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓ ✓	
Matrix Duplicates	✓	✓	CAF VS14
Method Blanks	✓	✓	CAF VR80
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	CAF VR80, VS14, A/U-All

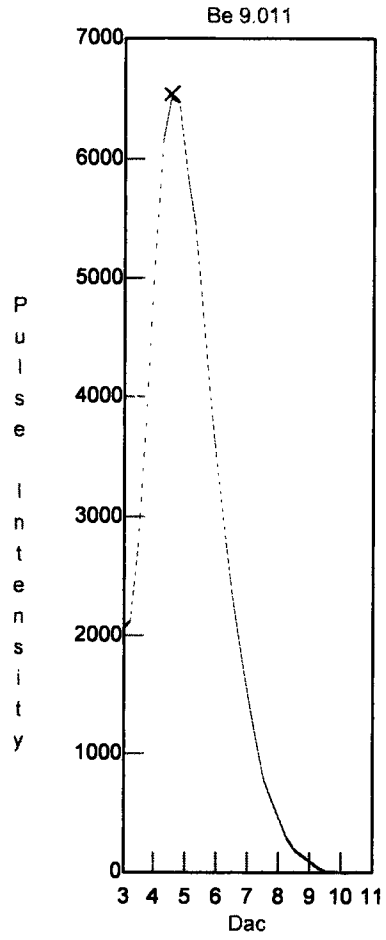
Instrument Tuning Report

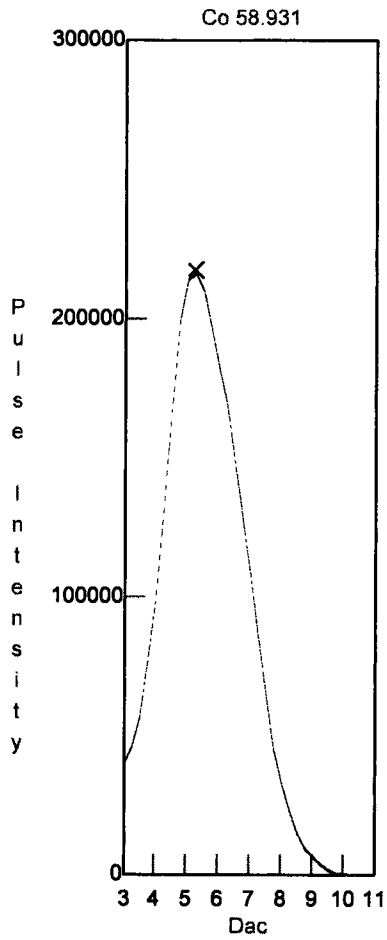
/ 5d

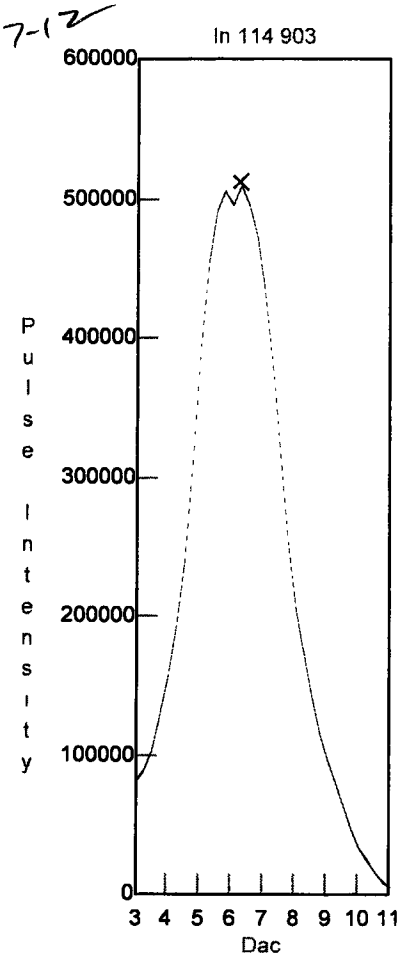
File Name: Default.tun
File Path: C:\Elandata\Tuning\Default.tun

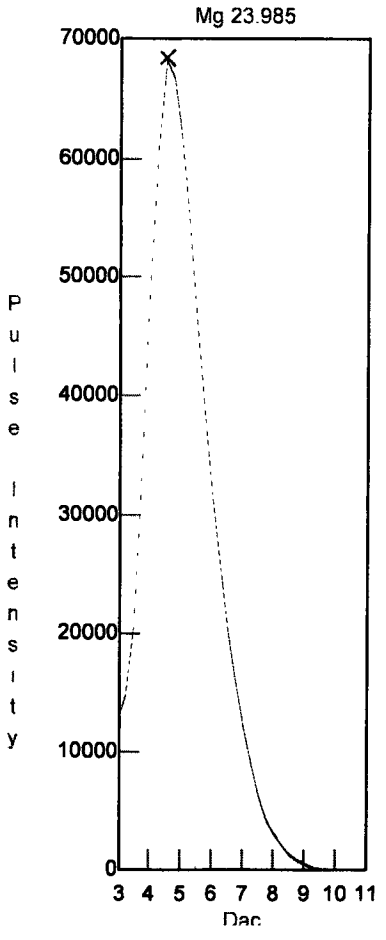
Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	8.975	2030	2158	0.696	
Mg	23.985	24.029	5662	2265	0.686	
Co	58.933	58.979	14168	2532	0.712	
In	114.904	114.879	27799	2979	0.716	
Pb	207.977	207.974	50447	3725	0.716	

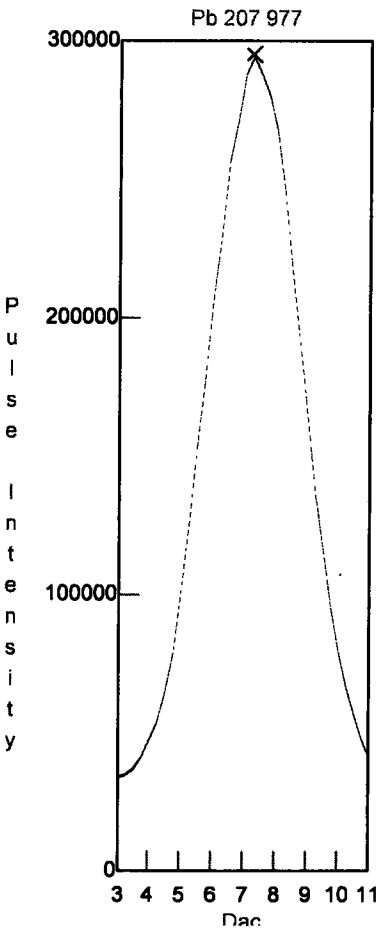
11-27-12

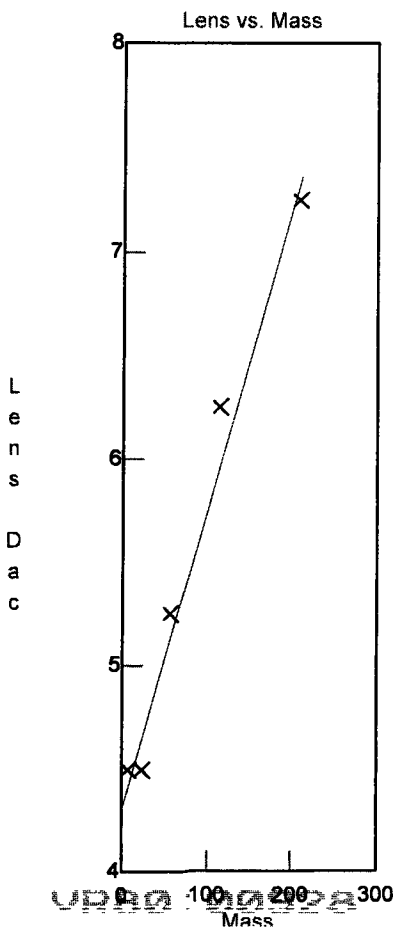

Be 9.011
Pulse Intensity
7000
6000
5000
4000
3000
2000
1000
0
3 4 5 6 7 8 9 10 11
Dac


Co 58.931
Pulse Intensity
300000
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac


In 114 903
Pulse Intensity
600000
500000
400000
300000
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac


Mg 23.985
Pulse Intensity
70000
60000
50000
40000
30000
20000
10000
0
3 4 5 6 7 8 9 10 11
Dac


Pb 207 977
Pulse Intensity
300000
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac


Lens vs. Mass
Lens Dac
8
7
6
5
4
100
200
300
Mass

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, November 27, 2012 09:45:48
Sample Description:
Sample File: C:\Elandata\Sample\1119.sam
Method File: C:\Elandata\Method\aridailyperf.mth
Dataset File: C:\Elandata\Dataset\daily performance\Sample.1185
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\Default.dac
Number of Replicates: 5
Dual Detector Mode: Dual

0.88

Summary

	Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24	39150.784	363.793	0.929
	In	115	358208.643	2677.189	0.747
	Pb	208	217520.953	2983.980	1.372
⌈>	Ba	138	259567.819	2640.996	1.017
⌊	Ba++	69	0.012	0.000	2.521
⌈>	Ce	140	312604.824	2400.214	0.768
⌊	CeO	156	0.030	0.001	1.647
	Bkgd	220	213.524	40.272	18.861

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 10:11:30
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L				289574	1
[	Be	9		ug/L				5	65
	C	13		mg/L				3530	0
	Cl	37		mg/L				1867713	0
[>	Sc	45		ug/L				207316	0
[	V	51		ug/L				1532	8
[	V-1	51		ug/L				3341	2
[	Cr	52		ug/L				4636	1
[	Cr	53		ug/L				1102	4
[	Mn	55		ug/L				366	1
[	Co	59		ug/L				37	3
[>	Ge	72		ug/L				272714	0
[	Ni	60		ug/L				62	16
[	Ni	62		ug/L				61	16
[	Cu	63		ug/L				185	12
[	Cu	65		ug/L				78	24
[	Zn	66		ug/L				327	1
[	Zn	67		ug/L				127	1
[	Zn	68		ug/L				6722	1
[	As	75		ug/L				237	11
[	As-1	75		ug/L				7657	0
[	Se	82		ug/L				-3	286
[	Se	78		ug/L				7753	0
[	Mo	98		ug/L				298	3
	Y	89		ug/L				265659	0
	Kr	83		ug/L				145	1
[>	In	115		ug/L				296249	1
[	Ag	107		ug/L				18	19
[	Cd	111		ug/L				145	1
[	Cd	114		ug/L				20	9
[	Sb	121		ug/L				20	9
[	Sb	123		ug/L				8	43
[	Ba	135		ug/L				26	21
[	Ba	137		ug/L				36	12
[>	Tb	159		ug/L				387742	0
[	Tl	205		ug/L				95	12
[	Pb	208		ug/L				612	0
[	Bi	209		ug/L				325230	0
[	Th	232		ug/L				429	9
[	U	238		ug/L				543	17

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 10:17:38
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	288313	0
[	Be	9	10.000	ug/L	0.084	0	5	3826	0
	C	13		mg/L			3530	3873	1
	Cl	37		mg/L			1867713	1879236	0
[>	Sc	45		ug/L			207316	210646	1
[	V	51	10.000	ug/L	0.084	0	1532	95057	0
[	V-1	51	10.000	ug/L	0.118	1	3341	98546	0
[	Cr	52	10.000	ug/L	0.219	2	4636	87317	0
[	Cr	53	10.000	ug/L	0.335	3	1102	10982	1
[	Mn	55	10.000	ug/L	0.156	1	366	138502	1
[	Co	59	10.000	ug/L	0.129	1	37	106752	0
[>	Ge	72		ug/L			272714	274340	1
[	Ni	60	10.000	ug/L	0.240	2	62	22744	1
[	Ni	62	10.000	ug/L	0.263	2	61	3310	1
[	Cu	63	10.000	ug/L	0.198	1	185	50422	1
[	Cu	65	10.000	ug/L	0.116	1	78	24341	0
[	Zn	66	10.000	ug/L	0.160	1	327	15237	1
[	Zn	67	10.000	ug/L	0.133	1	127	2661	2
[	Zn	68	10.000	ug/L	0.297	2	6722	17596	2
[	As	75	10.000	ug/L	0.072	0	237	16507	0
[	As-1	75	10.000	ug/L	0.173	1	7657	23574	0
[	Se	82	10.000	ug/L	0.252	2	-3	1771	1
[	Se	78	10.000	ug/L	0.693	6	7753	11933	1
[	Mo	98	10.000	ug/L	0.175	1	298	59901	2
	Y	89		ug/L			265659	267638	1
	Kr	83		ug/L			145	154	1
[>	In	115		ug/L			296249	295457	0
[	Ag	107	10.000	ug/L	0.081	0	18	95994	1
[	Cd	111	10.000	ug/L	0.057	0	145	24755	1
[	Cd	114	10.000	ug/L	0.031	0	20	57386	0
[	Sb	121	10.000	ug/L	0.100	0	20	86292	0
[	Sb	123	10.000	ug/L	0.052	0	8	65963	0
[	Ba	135	10.000	ug/L	0.141	1	26	20721	1
[	Ba	137	10.000	ug/L	0.246	2	36	35791	2
[>	Tb	159		ug/L			387742	385154	1
[	Tl	205	10.000	ug/L	0.093	0	95	278718	0
[	Pb	208	10.000	ug/L	0.196	1	612	380747	0
[	Bi	209		ug/L			325230	323701	1
[	Th	232	10.000	ug/L	0.226	2	429	459520	0
[	U	238	10.000	ug/L	0.154	1	543	524520	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 10:23:47
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	279280	1
[	Be	9	19.949	ug/L	0.327	1	5	7312	1
	C	13		mg/L			3530	4385	1
	Cl	37		mg/L			1867713	1860992	0
[>	Sc	45		ug/L			207316	205175	0
[	V	51	19.977	ug/L	0.104	0	1532	182631	0
[	V-1	51	20.001	ug/L	0.145	0	3341	188740	0
[	Cr	52	20.035	ug/L	0.190	0	4636	166950	0
[	Cr	53	20.104	ug/L	0.211	1	1102	20818	0
[	Mn	55	19.914	ug/L	0.342	1	366	263822	2
[	Co	59	19.985	ug/L	0.118	0	37	207186	1
[>	Ge	72		ug/L			272714	269162	0
[	Ni	60	19.934	ug/L	0.239	1	62	43857	1
[	Ni	62	20.163	ug/L	0.177	0	61	6706	0
[	Cu	63	19.983	ug/L	0.146	0	185	98358	1
[	Cu	65	19.956	ug/L	0.228	1	78	47167	1
[	Zn	66	20.091	ug/L	0.146	0	327	30259	0
[	Zn	67	20.058	ug/L	0.518	2	127	5169	2
[	Zn	68	19.973	ug/L	0.102	0	6722	27746	0
[	As	75	19.997	ug/L	0.104	0	237	32134	0
[	As-1	75	20.010	ug/L	0.049	0	7657	38783	0
[	Se	82	20.009	ug/L	0.069	0	-3	3487	0
[	Se	78	20.043	ug/L	0.209	1	7753	15857	0
[	Mo	98	20.036	ug/L	0.362	1	298	118300	1
	Y	89		ug/L			265659	262970	1
	Kr	83		ug/L			145	147	5
[>	In	115		ug/L			296249	283707	0
[	Ag	107	20.086	ug/L	0.189	0	18	188369	0
[	Cd	111	20.122	ug/L	0.092	0	145	48886	0
[	Cd	114	20.076	ug/L	0.100	0	20	112303	0
[	Sb	121	20.110	ug/L	0.186	0	20	170353	0
[	Sb	123	20.066	ug/L	0.121	0	8	128806	0
[	Ba	135	20.079	ug/L	0.295	1	26	40569	1
[	Ba	137	20.128	ug/L	0.138	0	36	70959	0
[>	Tb	159		ug/L			387742	375333	1
[	Tl	205	19.997	ug/L	0.452	2	95	542747	1
[	Pb	208	20.042	ug/L	0.192	0	612	749473	0
[	Bi	209		ug/L			325230	317244	0
[	Th	232	20.112	ug/L	0.405	2	429	920974	0
[	U	238	20.057	ug/L	0.523	2	543	1036637	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 10:29:55
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	288104	0
[	Be	9	50.062	ug/L	1.109	2	5	19042	1
	C	13		mg/L			3530	3647	2
	Cl	37		mg/L			1867713	1900060	0
[>	Sc	45		ug/L			207316	215266	0
[	V	51	49.955	ug/L	0.345	0	1532	474645	1
[	V-1	51	49.925	ug/L	0.286	0	3341	485512	1
[	Cr	52	49.954	ug/L	0.110	0	4636	427636	0
[	Cr	53	49.864	ug/L	0.381	0	1102	51798	1
[	Mn	55	49.950	ug/L	0.480	0	366	690204	1
[	Co	59	49.843	ug/L	0.378	0	37	533738	1
[>	Ge	72		ug/L			272714	281765	1
[	Ni	60	49.923	ug/L	0.500	1	62	113992	0
[	Ni	62	49.859	ug/L	1.183	2	61	17028	3
[	Cu	63	49.835	ug/L	0.660	1	185	252313	1
[	Cu	65	49.793	ug/L	0.561	1	78	120571	0
[	Zn	66	49.785	ug/L	0.633	1	327	76353	1
[	Zn	67	49.936	ug/L	0.461	0	127	13192	0
[	Zn	68	49.842	ug/L	0.612	1	6722	61236	1
[	As	75	49.953	ug/L	0.348	0	237	83274	0
[	As-1	75	49.940	ug/L	0.428	0	7657	89005	0
[	Se	82	49.881	ug/L	0.725	1	-3	8999	1
[	Se	78	49.813	ug/L	0.729	1	7753	28962	0
[	Mo	98	50.019	ug/L	0.633	1	298	309298	1
	Y	89		ug/L			265659	276639	1
	Kr	83		ug/L			145	156	6
[>	In	115		ug/L			296249	298192	0
[	Ag	107	49.988	ug/L	0.484	0	18	492139	0
[	Cd	111	49.897	ug/L	0.446	0	145	125891	0
[	Cd	114	49.941	ug/L	0.819	1	20	291878	1
[	Sb	121	49.889	ug/L	0.495	0	20	439296	1
[	Sb	123	49.892	ug/L	0.718	1	8	333012	1
[	Ba	135	49.948	ug/L	0.507	1	26	105491	1
[	Ba	137	49.868	ug/L	1.278	2	36	182308	2
[>	Tb	159		ug/L			387742	393561	0
[	Tl	205	49.776	ug/L	1.092	2	95	1385606	2
[	Pb	208	49.835	ug/L	0.641	1	612	1921506	1
[	Bi	209		ug/L			325230	325541	1
[	Th	232	50.285	ug/L	0.728	1	429	2484945	1
[	U	238	50.232	ug/L	0.279	0	543	2785986	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 10:36:03
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	280455	0
[	Be	9	100.002	ug/L	1.605	1	5	37026	1
	C	13		mg/L			3530	4291	1
	Cl	37		mg/L			1867713	1928812	0
[>	Sc	45		ug/L			207316	215564	0
[	V	51	99.522	ug/L	1.729	1	1532	930481	1
[	V-1	51	99.603	ug/L	1.120	1	3341	953874	0
[	Cr	52	99.344	ug/L	2.097	2	4636	828764	1
[	Cr	53	99.602	ug/L	1.359	1	1102	101131	0
[	Mn	55	99.824	ug/L	2.115	2	366	1372665	1
[	Co	59	99.282	ug/L	1.562	1	37	1039602	1
[>	Ge	72		ug/L			272714	278916	0
[	Ni	60	99.449	ug/L	0.934	0	62	220680	0
[	Ni	62	99.468	ug/L	2.293	2	61	32975	1
[	Cu	63	99.393	ug/L	1.730	1	185	488098	1
[	Cu	65	99.708	ug/L	1.488	1	78	236620	1
[	Zn	66	99.371	ug/L	0.753	0	327	147452	0
[	Zn	67	99.538	ug/L	1.853	1	127	25509	1
[	Zn	68	99.749	ug/L	0.673	0	6722	113536	0
[	As	75	99.801	ug/L	0.182	0	237	163374	0
[	As-1	75	99.893	ug/L	0.088	0	7657	167838	0
[	Se	82	99.415	ug/L	1.531	1	-3	17419	1
[	Se	78	99.758	ug/L	0.788	0	7753	49135	0
[	Mo	98	99.664	ug/L	1.215	1	298	602990	1
	Y	89		ug/L			265659	271616	0
	Kr	83		ug/L			145	176	3
[>	In	115		ug/L			296249	292302	0
[	Ag	107	99.521	ug/L	1.007	1	18	945329	0
[	Cd	111	99.770	ug/L	0.777	0	145	244729	0
[	Cd	114	99.656	ug/L	0.809	0	20	564440	1
[	Sb	121	99.942	ug/L	0.298	0	20	860976	0
[	Sb	123	100.003	ug/L	0.474	0	8	654353	0
[	Ba	135	99.890	ug/L	1.280	1	26	206022	1
[	Ba	137	99.939	ug/L	1.057	1	36	357386	0
[>	Tb	159		ug/L			387742	389700	1
[	Tl	205	100.734	ug/L	2.786	2	95	2845383	1
[	Pb	208	99.243	ug/L	1.144	1	612	3694644	0
[	Bi	209		ug/L			325230	318370	0
[	Th	232	99.511	ug/L	1.039	1	429	4790380	0
[	U	238	99.954	ug/L	2.945	2	543	5478523	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse Sample
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 10:42:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			289574	285515	0
[	**Be**	**9**	**-0.009**	ug/L	0.006	67	5	2	86
	C	**13**		mg/L			3530	3390	2
	Cl	**37**		mg/L			1867713	1955368	0
[>	**Sc**	**45**		ug/L			207316	216487	0
[	**V**	**51**	**-0.032**	ug/L	0.019	58	1532	1297	14
[	**V-1**	**51**	**-0.040**	ug/L	0.008	19	3341	3109	3
[	**Cr**	**52**	**-0.017**	ug/L	0.016	95	4636	4698	2
[	**Cr**	**53**	**-0.040**	ug/L	0.030	75	1102	1110	2
[	**Mn**	**55**	**0.001**	ug/L	0.003	582	366	390	10
[	**Co**	**59**	**0.000**	ug/L	0.001	2906	37	39	31
[>	**Ge**	**72**		ug/L			272714	282235	1
[	**Ni**	**60**	**-0.006**	ug/L	0.004	60	62	50	15
[	**Ni**	**62**	**-0.025**	ug/L	0.023	92	61	55	14
[	**Cu**	**63**	**0.001**	ug/L	0.005	809	185	195	10
[	**Cu**	**65**	**0.001**	ug/L	0.006	417	78	85	18
[	**Zn**	**66**	**-0.026**	ug/L	0.004	17	327	300	3
[	**Zn**	**67**	**-0.010**	ug/L	0.031	324	127	129	7
[	**Zn**	**68**	**-0.090**	ug/L	0.169	188	6722	6858	1
[	**As**	**75**	**-0.003**	ug/L	0.014	417	237	239	7
[	**As-1**	**75**	**-0.037**	ug/L	0.105	282	7657	7863	0
[	**Se**	**82**	**-0.007**	ug/L	0.052	753	-3	-4	199
[	**Se**	**78**	**-0.113**	ug/L	0.398	351	7753	7975	0
[	**Mo**	**98**	**-0.027**	ug/L	0.006	21	298	144	23
	Y	**89**		ug/L			265659	273680	0
	Kr	**83**		ug/L			145	154	2
[>	**In**	**115**		ug/L			296249	302612	0
[	**Ag**	**107**	**0.015**	ug/L	0.005	35	18	163	30
[	**Cd**	**111**	**0.007**	ug/L	0.003	42	145	165	3
[	**Cd**	**114**	**-0.001**	ug/L	0.001	111	20	17	25
[	**Sb**	**121**	**0.029**	ug/L	0.010	35	20	281	32
[	**Sb**	**123**	**0.027**	ug/L	0.007	25	8	194	23
[	**Ba**	**135**	**0.007**	ug/L	0.001	13	26	42	5
[	**Ba**	**137**	**0.008**	ug/L	0.002	22	36	65	9
[>	**Tb**	**159**		ug/L			387742	394244	0
[	**Tl**	**205**	**0.010**	ug/L	0.003	35	95	376	26
[	**Pb**	**208**	**0.011**	ug/L	0.004	33	612	1035	13
[	**Bi**	**209**		ug/L			325230	333801	0
[	**Th**	**232**	**0.062**	ug/L	0.015	24	429	3460	21
[	**U**	**238**	**0.023**	ug/L	0.017	72	543	1825	50

Quantitative Analysis - Calibration Report

Sample Date/Time: Tuesday, November 27, 2012 10:42:42
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

Analyte	Mass	r Corr Coeff	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	1.0000	0.0013	10	20	50	100	
C	13							
Cl	37							
Sc	45							
V	51	1.0000	0.0433	10	20	50	100	
V-1	51	1.0000	0.0443	10	20	50	100	
Cr	52	0.9999	0.0385	10	20	50	100	
Cr	53	1.0000	0.0047	10	20	50	100	
Mn	55	1.0000	0.0638	10	20	50	100	
Co	59	0.9999	0.0486	10	20	50	100	
Ge	72							
Ni	60	0.9999	0.0080	10	20	50	100	
Ni	62	0.9999	0.0012	10	20	50	100	
Cu	63	0.9999	0.0176	10	20	50	100	
Cu	65	1.0000	0.0085	10	20	50	100	
Zn	66	0.9999	0.0053	10	20	50	100	
Zn	67	1.0000	0.0009	10	20	50	100	
Zn	68	1.0000	0.0038	10	20	50	100	
As	75	1.0000	0.0059	10	20	50	100	
As-1	75	1.0000	0.0057	10	20	50	100	
Se	82	0.9999	0.0006	10	20	50	100	
Se	78	1.0000	0.0015	10	20	50	100	
Mo	98	1.0000	0.0217	10	20	50	100	
Y	89							
Kr	83							
In	115							
Ag	107	1.0000	0.0325	10	20	50	100	
Cd	111	1.0000	0.0084	10	20	50	100	
Cd	114	1.0000	0.0194	10	20	50	100	
Sb	121	1.0000	0.0295	10	20	50	100	
Sb	123	1.0000	0.0224	10	20	50	100	
Ba	135	1.0000	0.0071	10	20	50	100	
Ba	137	1.0000	0.0122	10	20	50	100	
Tb	159							
Tl	205	0.9999	0.0725	10	20	50	100	
Pb	208	0.9999	0.0955	10	20	50	100	
Bi	209							
Th	232	0.9999	0.1235	10	20	50	100	
U	238	1.0000	0.1407	10	20	50	100	

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 10:50:15
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	291887	0
[	Be	9	50.330	ug/L	0.958	1	5	19398	2
	C	13		mg/L			3530	8503	3
	Cl	37		mg/L			1867713	1968627	0
[>	Sc	45		ug/L			207316	224610	0
[	V	51	51.117	ug/L	0.620	1	1532	498819	1
[	V-1	51	50.819	ug/L	0.470	0	3341	508917	1
[	Cr	52	49.747	ug/L	0.976	1	4636	434907	1
[	Cr	53	48.931	ug/L	0.790	1	1102	52373	0
[	Mn	55	50.130	ug/L	0.827	1	366	718467	0
[	Co	59	51.008	ug/L	0.806	1	37	556530	0
[>	Ge	72		ug/L			272714	290122	0
[	Ni	60	50.278	ug/L	1.059	2	62	116084	2
[	Ni	62	51.059	ug/L	1.073	2	61	17639	1
[	Cu	63	51.510	ug/L	0.266	0	185	263222	0
[	Cu	65	50.514	ug/L	1.097	2	78	124727	1
[	Zn	66	50.089	ug/L	0.861	1	327	77479	1
[	Zn	67	50.298	ug/L	1.171	2	127	13475	1
[	Zn	68	49.462	ug/L	0.295	0	6722	62165	0
[	As	75	51.858	ug/L	0.595	1	237	88419	0
[	As-1	75	50.860	ug/L	0.561	1	7657	92882	0
[	Se	82	81.214	ug/L	0.906	1	-3	14801	1
[	Se	78	79.592	ug/L	0.931	1	7753	42446	1
[	Mo	98	49.169	ug/L	0.378	0	298	309590	0
	Y	89		ug/L			265659	283312	0
	Kr	83		ug/L			145	160	4
[>	In	115		ug/L			296249	308298	0
[	Ag	107	50.593	ug/L	0.226	0	18	506894	1
[	Cd	111	48.853	ug/L	0.363	0	145	126471	1
[	Cd	114	49.043	ug/L	0.170	0	20	292986	1
[	Sb	121	49.140	ug/L	0.794	1	20	446465	0
[	Sb	123	48.638	ug/L	0.576	1	8	335659	0
[	Ba	135	49.390	ug/L	0.806	1	26	107444	0
[	Ba	137	49.731	ug/L	0.701	1	36	187586	1
[>	Tb	159		ug/L			387742	406546	1
[	Tl	205	47.994	ug/L	0.793	1	95	1414589	1
[	Pb	208	50.665	ug/L	0.364	0	612	1968164	0
[	Bi	209		ug/L			325230	337552	1
[	Th	232	51.505	ug/L	0.877	1	429	2586762	1
[	U	238	50.884	ug/L	0.862	1	543	2910335	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 10:56:53
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			289574	287067	0
[	**Be**	**9**	**-0.005**	ug/L	0.000	1	5	3	
	C	**13**		mg/L			3530	3448	2
	Cl	**37**		mg/L			1867713	1968387	0
[>	**Sc**	**45**		ug/L			207316	215190	1
[	**V**	**51**	**-0.020**	ug/L	0.017	82	1532	1401	12
[	**V-1**	**51**	**-0.048**	ug/L	0.006	13	3341	3012	2
[	**Cr**	**52**	**-0.026**	ug/L	0.007	28	4636	4598	2
[	**Cr**	**53**	**-0.109**	ug/L	0.053	48	1102	1034	4
[	**Mn**	**55**	**-0.003**	ug/L	0.002	62	366	338	8
[	**Co**	**59**	**0.001**	ug/L	0.000	16	37	45	3
[>	**Ge**	**72**		ug/L			272714	282841	0
[	**Ni**	**60**	**-0.003**	ug/L	0.008	230	62	57	29
[	**Ni**	**62**	**-0.022**	ug/L	0.026	117	61	56	15
[	**Cu**	**63**	**-0.001**	ug/L	0.002	163	185	185	6
[	**Cu**	**65**	**0.003**	ug/L	0.005	167	78	88	12
[	**Zn**	**66**	**-0.013**	ug/L	0.012	92	327	320	6
[	**Zn**	**67**	**-0.030**	ug/L	0.012	39	127	124	2
[	**Zn**	**68**	**-0.173**	ug/L	0.047	27	6722	6784	1
[	**As**	**75**	**0.010**	ug/L	0.002	21	237	262	1
[	**As-1**	**75**	**-0.019**	ug/L	0.020	105	7657	7910	0
[	**Se**	**82**	**0.014**	ug/L	0.039	283	-3	0	725
[	**Se**	**78**	**-0.064**	ug/L	0.091	142	7753	8015	0
[	**Mo**	**98**	**-0.031**	ug/L	0.004	12	298	122	19
	Y	**89**		ug/L			265659	275543	1
	Kr	**83**		ug/L			145	156	3
[>	**In**	**115**		ug/L			296249	304497	0
[	**Ag**	**107**	**0.010**	ug/L	0.002	22	18	113	19
[	**Cd**	**111**	**0.006**	ug/L	0.002	38	145	163	3
[	**Cd**	**114**	**-0.002**	ug/L	0.001	69	20	11	59
[	**Sb**	**121**	**0.009**	ug/L	0.002	21	20	102	17
[	**Sb**	**123**	**0.010**	ug/L	0.002	16	8	80	15
[	**Ba**	**135**	**0.005**	ug/L	0.003	63	26	38	19
[	**Ba**	**137**	**0.004**	ug/L	0.003	64	36	52	18
[>	**Tb**	**159**		ug/L			387742	394033	1
[	**Tl**	**205**	**0.005**	ug/L	0.001	18	95	235	12
[	**Pb**	**208**	**0.005**	ug/L	0.000	8	612	821	3
[	**Bi**	**209**		ug/L			325230	332995	1
[	**Th**	**232**	**0.036**	ug/L	0.003	7	429	2212	7
[	**U**	**238**	**0.005**	ug/L	0.001	10	543	824	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 11:02:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	286838	0
[	Be	9	51.004	ug/L	0.873	1	5	19316	1
	C	13		mg/L			3530	3473	2
	Cl	37		mg/L			1867713	1971307	1
[>	Sc	45		ug/L			207316	213672	1
[	V	51	52.610	ug/L	0.466	0	1532	488302	0
[	V-1	51	52.508	ug/L	0.258	0	3341	500079	0
[	Cr	52	51.653	ug/L	0.465	0	4636	429428	0
[	Cr	53	51.406	ug/L	0.235	0	1102	52291	1
[	Mn	55	51.315	ug/L	0.232	0	366	699714	1
[	Co	59	52.102	ug/L	0.213	0	37	540852	1
[>	Ge	72		ug/L			272714	285619	0
[	Ni	60	49.959	ug/L	0.570	1	62	113553	0
[	Ni	62	50.128	ug/L	1.021	2	61	17049	1
[	Cu	63	51.240	ug/L	1.004	1	185	257773	1
[	Cu	65	50.492	ug/L	0.281	0	78	122749	0
[	Zn	66	51.575	ug/L	0.578	1	327	78532	0
[	Zn	67	51.310	ug/L	0.650	1	127	13530	0
[	Zn	68	50.544	ug/L	0.375	0	6722	62387	0
[	As	75	50.619	ug/L	0.674	1	237	84971	0
[	As-1	75	50.399	ug/L	0.842	1	7657	90682	0
[	Se	82	51.022	ug/L	0.548	1	-3	9153	0
[	Se	78	50.255	ug/L	1.039	2	7753	29376	0
[	Mo	98	50.360	ug/L	0.991	1	298	312155	1
	Y	89		ug/L			265659	281157	0
	Kr	83		ug/L			145	173	4
[>	In	115		ug/L			296249	304026	0
[	Ag	107	50.660	ug/L	0.071	0	18	500528	1
[	Cd	111	50.786	ug/L	0.211	0	145	129643	0
[	Cd	114	50.387	ug/L	0.788	1	20	296813	0
[	Sb	121	50.537	ug/L	0.941	1	20	452796	1
[	Sb	123	50.089	ug/L	0.504	1	8	340907	1
[	Ba	135	49.716	ug/L	0.580	1	26	106661	1
[	Ba	137	49.893	ug/L	0.665	1	36	185595	1
[>	Tb	159		ug/L			387742	395174	0
[	Tl	205	48.555	ug/L	0.445	0	95	1391224	1
[	Pb	208	50.883	ug/L	0.105	0	612	1921453	0
[	Bi	209		ug/L			325230	329515	1
[	Th	232	51.291	ug/L	0.638	1	429	2504262	1
[	U	238	50.188	ug/L	0.357	0	543	2790733	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 11:09:20
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	295936	1
[	Be	9	-0.004	ug/L	0.005	133	5	4	41
	C	13		mg/L			3530	3313	2
	Cl	37		mg/L			1867713	2043199	6
[>	Sc	45		ug/L			207316	215498	0
[	V	51	-0.007	ug/L	0.011	151	1532	1526	6
[	V-1	51	-0.056	ug/L	0.008	13	3341	2934	2
[	Cr	52	-0.025	ug/L	0.013	50	4636	4607	2
[	Cr	53	-0.174	ug/L	0.027	15	1102	970	2
[	Mn	55	-0.002	ug/L	0.001	38	366	360	2
[	Co	59	0.000	ug/L	0.001	438	37	41	28
[>	Ge	72		ug/L			272714	284939	0
[	Ni	60	-0.001	ug/L	0.007	635	62	63	24
[	Ni	62	-0.014	ug/L	0.003	19	61	59	1
[	Cu	63	-0.001	ug/L	0.002	146	185	188	4
[	Cu	65	0.001	ug/L	0.001	79	78	84	2
[	Zn	66	-0.011	ug/L	0.010	90	327	325	4
[	Zn	67	-0.067	ug/L	0.084	126	127	115	18
[	Zn	68	-0.095	ug/L	0.106	110	6722	6919	1
[	As	75	0.006	ug/L	0.016	240	237	258	10
[	As-1	75	-0.043	ug/L	0.028	64	7657	7929	0
[	Se	82	0.042	ug/L	0.012	28	-3	4	52
[	Se	78	-0.145	ug/L	0.115	79	7753	8040	0
[	Mo	98	-0.032	ug/L	0.002	5	298	115	9
	Y	89		ug/L			265659	277612	0
	Kr	83		ug/L			145	152	6
[>	In	115		ug/L			296249	304140	1
[	Ag	107	0.009	ug/L	0.003	35	18	110	30
[	Cd	111	0.003	ug/L	0.006	195	145	156	8
[	Cd	114	-0.001	ug/L	0.000	10	20	15	4
[	Sb	121	0.021	ug/L	0.002	9	20	207	9
[	Sb	123	0.021	ug/L	0.004	17	8	154	16
[	Ba	135	0.004	ug/L	0.005	140	26	34	31
[	Ba	137	0.007	ug/L	0.002	26	36	62	11
[>	Tb	159		ug/L			387742	391738	1
[	Tl	205	0.005	ug/L	0.001	19	95	226	10
[	Pb	208	0.005	ug/L	0.002	44	612	795	8
[	Bi	209		ug/L			325230	334995	1
[	Th	232	0.043	ug/L	0.007	16	429	2499	13
[	U	238	0.005	ug/L	0.001	22	543	807	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 11:15:08
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			289574	278494	0
⌊	Be	9	0.193	ug/L	0.044	22	5	76	21
	C	13		mg/L			3530	3557	1
	Cl	37		mg/L			1867713	1968021	0
⌈>	Sc	45		ug/L			207316	209119	0
|	V	51	0.194	ug/L	0.028	14	1532	3300	7
|	V-1	51	0.166	ug/L	0.019	11	3341	4908	3
|	Cr	52	0.538	ug/L	0.012	2	4636	9002	0
|	Cr	53	0.431	ug/L	0.033	7	1102	1531	2
|	Mn	55	0.545	ug/L	0.006	1	366	7641	1
⌊	Co	59	0.221	ug/L	0.007	3	37	2281	3
⌈>	Ge	72		ug/L			272714	278265	0
|	Ni	60	0.529	ug/L	0.027	5	62	1235	5
|	Ni	62	0.463	ug/L	0.038	8	61	215	6
|	Cu	63	0.556	ug/L	0.011	1	185	2910	0
|	Cu	65	0.559	ug/L	0.026	4	78	1403	3
|	Zn	66	4.450	ug/L	0.121	2	327	6906	1
|	Zn	67	3.966	ug/L	0.087	2	127	1138	1
|	Zn	68	4.289	ug/L	0.070	1	6722	11434	1
|	As	75	0.223	ug/L	0.031	13	237	605	7
|	As-1	75	0.311	ug/L	0.071	22	7657	8310	0
|	Se	82	0.496	ug/L	0.077	15	-3	83	15
|	Se	78	0.942	ug/L	0.254	26	7753	8299	0
⌊	Mo	98	0.163	ug/L	0.009	5	298	1290	4
	Y	89		ug/L			265659	269639	1
	Kr	83		ug/L			145	161	2
⌈>	In	115		ug/L			296249	294074	1
|	Ag	107	0.210	ug/L	0.002	0	18	2020	0
|	Cd	111	0.108	ug/L	0.004	4	145	410	3
|	Cd	114	0.106	ug/L	0.009	8	20	623	9
|	Sb	121	0.207	ug/L	0.006	2	20	1813	1
|	Sb	123	0.210	ug/L	0.008	3	8	1390	2
|	Ba	135	0.522	ug/L	0.031	5	26	1109	5
⌊	Ba	137	0.537	ug/L	0.009	1	36	1966	2
⌈>	Tb	159		ug/L			387742	379492	0
|	Tl	205	0.216	ug/L	0.003	1	95	6040	1
|	Pb	208	0.129	ug/L	0.002	1	612	5260	0
|	Bi	209		ug/L			325230	322282	1
|	Th	232	0.232	ug/L	0.003	1	429	11299	1
⌊	U	238	0.205	ug/L	0.006	3	543	11500	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 11:20:56
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	275763	1
[	Be	9	0.004	ug/L	0.004	92	5	7	20
	C	13		mg/L			3530	14103	1
	Cl	37		mg/L			1867713	3455139	1
[>	Sc	45		ug/L			207316	208593	0
[	V	51	-0.007	ug/L	0.011	157	1532	1479	6
[	V-1	51	0.579	ug/L	0.016	2	3341	8710	1
[	Cr	52	0.460	ug/L	0.019	4	4636	8358	2
[	Cr	53	2.211	ug/L	0.043	1	1102	3256	0
[	Mn	55	0.070	ug/L	0.005	7	366	1296	4
[	Co	59	0.023	ug/L	0.002	6	37	268	6
[>	Ge	72		ug/L			272714	279521	1
[	Ni	60	0.482	ug/L	0.022	4	62	1136	4
[	Ni	62	3.712	ug/L	0.016	0	61	1294	1
[	Cu	63	0.434	ug/L	0.010	2	185	2324	3
[	Cu	65	0.623	ug/L	0.022	3	78	1562	4
[	Zn	66	1.102	ug/L	0.038	3	327	1971	3
[	Zn	67	1.362	ug/L	0.028	2	127	478	2
[	Zn	68	-0.095	ug/L	0.044	45	6722	6787	0
[	As	75	0.104	ug/L	0.011	10	237	412	3
[	As-1	75	-0.014	ug/L	0.031	218	7657	7825	0
[	Se	82	-0.036	ug/L	0.063	175	-3	-9	115
[	Se	78	-0.326	ug/L	0.115	35	7753	7812	0
[	Mo	98	413.512	ug/L	5.341	1	298	2506141	0
	Y	89		ug/L			265659	270459	0
	Kr	83		ug/L			145	177	3
[>	In	115		ug/L			296249	292357	1
[	Ag	107	0.024	ug/L	0.003	12	18	245	11
[	Cd	111	0.024	ug/L	0.016	65	145	201	19
[	Cd	114	0.667	ug/L	0.016	2	20	3796	1
[	Sb	121	0.066	ug/L	0.001	1	20	592	0
[	Sb	123	0.066	ug/L	0.005	7	8	443	6
[	Ba	135	0.035	ug/L	0.005	15	26	97	12
[	Ba	137	0.034	ug/L	0.004	11	36	157	8
[>	Tb	159		ug/L			387742	384367	2
[	Tl	205	0.032	ug/L	0.001	3	95	1000	5
[	Pb	208	0.029	ug/L	0.002	5	612	1678	3
[	Bi	209		ug/L			325230	316042	0
[	Th	232	0.097	ug/L	0.017	17	429	5015	14
[	U	238	0.004	ug/L	0.002	38	543	754	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 11:27:14
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			289574	271242	0
	Be	9	-0.000	ug/L	0.002	1551	5	5	13
	C	13		mg/L			3530	13609	2
	Cl	37		mg/L			1867713	3257270	1
>	Sc	45		ug/L			207316	196943	1
	V	51	-0.392	ug/L	0.143	36	1532	-1881	64
	V-1	51	0.671	ug/L	0.025	3	3341	9023	1
	Cr	52	21.024	ug/L	0.113	0	4636	163729	1
	Cr	53	22.835	ug/L	0.357	1	1102	21988	0
	Mn	55	20.697	ug/L	0.100	0	366	260308	0
	Co	59	20.630	ug/L	0.096	0	37	197402	1
>	Ge	72		ug/L			272714	266039	1
	Ni	60	20.200	ug/L	0.506	2	62	42797	1
	Ni	62	23.433	ug/L	0.482	2	61	7456	2
	Cu	63	20.358	ug/L	0.432	2	185	95490	1
	Cu	65	20.401	ug/L	0.176	0	78	46243	1
	Zn	66	21.011	ug/L	0.209	0	327	29991	1
	Zn	67	18.649	ug/L	0.300	1	127	4659	0
	Zn	68	18.936	ug/L	0.167	0	6722	25872	1
	As	75	19.645	ug/L	0.082	0	237	30859	1
	As-1	75	19.984	ug/L	0.122	0	7657	38002	1
	Se	82	-0.033	ug/L	0.056	168	-3	-8	107
	Se	78	-0.099	ug/L	0.268	269	7753	7524	1
	Mo	98	414.184	ug/L	0.633	0	298	2389332	1
	Y	89		ug/L			265659	262020	2
	Kr	83		ug/L			145	169	4
>	In	115		ug/L			296249	276804	1
	Ag	107	20.123	ug/L	0.325	1	18	181016	1
	Cd	111	20.311	ug/L	0.356	1	145	47282	0
	Cd	114	20.657	ug/L	0.307	1	20	110793	0
	Sb	121	0.065	ug/L	0.006	9	20	552	8
	Sb	123	0.066	ug/L	0.004	5	8	417	4
	Ba	135	0.032	ug/L	0.004	13	26	87	9
	Ba	137	0.036	ug/L	0.003	8	36	154	6
>	Tb	159		ug/L			387742	378841	0
	Tl	205	0.033	ug/L	0.000	0	95	991	1
	Pb	208	0.031	ug/L	0.001	4	612	1706	3
	Bi	209		ug/L			325230	315172	0
	Th	232	0.050	ug/L	0.003	5	429	2746	4
	U	238	0.006	ug/L	0.001	12	543	841	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 11:33:31
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	273862	1
[	Be	9	201.780	ug/L	2.628	1	5	72945	0
	C	13		mg/L			3530	4039	4
	Cl	37		mg/L			1867713	1816253	0
[>	Sc	45		ug/L			207316	205526	2
[	V	51	201.678	ug/L	2.510	1	1532	1795930	1
[	V-1	51	200.985	ug/L	3.134	1	3341	1831386	1
[	Cr	52	202.385	ug/L	1.591	0	4636	1604944	2
[	Cr	53	200.233	ug/L	3.192	1	1102	192697	1
[	Mn	55	211.918	ug/L	2.941	1	366	2777579	1
[	Co	59	199.512	ug/L	4.623	2	37	1991140	0
[>	Ge	72		ug/L			272714	272922	1
[	Ni	60	193.124	ug/L	2.893	1	62	419269	1
[	Ni	62	194.275	ug/L	2.146	1	61	62963	0
[	Cu	63	194.278	ug/L	4.069	2	185	933297	1
[	Cu	65	191.945	ug/L	1.744	0	78	445642	0
[	Zn	66	197.941	ug/L	1.249	0	327	287073	0
[	Zn	67	193.642	ug/L	1.959	1	127	48439	0
[	Zn	68	193.271	ug/L	2.284	1	6722	208950	1
[	As	75	197.875	ug/L	1.268	0	237	316721	0
[	As-1	75	197.968	ug/L	0.827	0	7657	317945	0
[	Se	82	196.444	ug/L	4.264	2	-3	33684	2
[	Se	78	196.561	ug/L	2.735	1	7753	87206	1
[	Mo	98	200.734	ug/L	3.384	1	298	1188214	2
	Y	89		ug/L			265659	266300	1
	Kr	83		ug/L			145	172	2
[>	In	115		ug/L			296249	285739	1
[	Ag	107	195.630	ug/L	2.240	1	18	1816484	1
[	Cd	111	199.479	ug/L	4.776	2	145	478065	0
[	Cd	114	198.103	ug/L	1.886	0	20	1096696	0
[	Sb	121	202.337	ug/L	2.309	1	20	1703726	0
[	Sb	123	202.482	ug/L	3.098	1	8	1294952	0
[	Ba	135	202.682	ug/L	4.348	2	26	408515	0
[	Ba	137	202.440	ug/L	2.712	1	36	707588	1
[>	Tb	159		ug/L			387742	388794	0
[	Tl	205	204.005	ug/L	3.790	1	95	5750507	2
[	Pb	208	205.739	ug/L	2.069	1	612	7641545	0
[	Bi	209		ug/L			325230	305389	0
[	Th	232	207.532	ug/L	4.917	2	429	9967004	2
[	U	238	202.283	ug/L	2.435	1	543	11064047	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR300
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 11:40:08
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	274475	1
[	Be	9	295.984	ug/L	0.722	0	5	107248	1
	C	13		mg/L			3530	4299	0
	Cl	37		mg/L			1867713	1891197	1
[>	Sc	45		ug/L			207316	211629	3
[	V	51	337.742	ug/L	8.636	2	1532	3095002	1
[	V-1	51	330.765	ug/L	8.118	2	3341	3100467	1
[	Cr	52	320.479	ug/L	6.438	2	4636	2613368	1
[	Cr	53	300.416	ug/L	7.741	2	1102	297058	1
[	Mn	55	319.732	ug/L	4.394	1	366	4314732	2
[	Co	59	316.617	ug/L	12.017	3	37	3252497	1
[>	Ge	72		ug/L			272714	278735	0
[	Ni	60	283.390	ug/L	2.540	0	62	628311	0
[	Ni	62	287.234	ug/L	2.917	1	61	95046	1
[	Cu	63	285.600	ug/L	1.661	0	185	1401277	0
[	Cu	65	283.185	ug/L	4.330	1	78	671527	2
[	Zn	66	286.034	ug/L	2.619	0	327	423552	1
[	Zn	67	285.012	ug/L	1.115	0	127	72758	1
[	Zn	68	282.076	ug/L	2.831	1	6722	308287	0
[	As	75	290.874	ug/L	1.046	0	237	475386	0
[	As-1	75	291.003	ug/L	1.940	0	7657	473637	0
[	Se	82	287.948	ug/L	1.345	0	-3	50430	1
[	Se	78	288.114	ug/L	2.073	0	7753	126853	0
[	Mo	98	299.681	ug/L	1.386	0	298	1811403	1
	Y	89		ug/L			265659	270198	2
	Kr	83		ug/L			145	204	3
[>	In	115		ug/L			296249	291995	1
[	Ag	107	309.402	ug/L	5.375	1	18	2935773	1
[	Cd	111	293.488	ug/L	3.305	1	145	718859	1
[	Cd	114	290.955	ug/L	1.973	0	20	1646097	0
[	Sb	121	318.544	ug/L	3.351	1	20	2741302	1
[	Sb	123	297.313	ug/L	4.490	1	8	1943228	1
[	Ba	135	296.064	ug/L	3.877	1	26	609877	0
[	Ba	137	298.488	ug/L	5.265	1	36	1066119	0
[>	Tb	159		ug/L			387742	386798	0
[	Tl	205	305.976	ug/L	6.241	2	95	8579658	1
[	Pb	208	320.747	ug/L	3.929	1	612	11851371	0
[	Bi	209		ug/L			325230	278348	0
[	Th	232	308.476	ug/L	5.950	1	429	14738351	1
[	U	238	305.856	ug/L	4.743	1	543	16644491	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 11:46:46
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	289008	1
[	Be	9	50.207	ug/L	0.297	0	5	19158	0
	C	13		mg/L			3530	3543	1
	Cl	37		mg/L			1867713	2008287	6
[>	Sc	45		ug/L			207316	216928	1
[	V	51	50.961	ug/L	0.719	1	1532	480244	1
[	V-1	51	50.899	ug/L	0.948	1	3341	492183	1
[	Cr	52	50.625	ug/L	0.559	1	4636	427397	1
[	Cr	53	50.458	ug/L	1.230	2	1102	52114	0
[	Mn	55	50.935	ug/L	0.666	1	366	705013	1
[	Co	59	50.877	ug/L	0.187	0	37	536144	1
[>	Ge	72		ug/L			272714	282658	2
[	Ni	60	50.259	ug/L	1.856	3	62	112999	1
[	Ni	62	49.578	ug/L	1.035	2	61	16684	0
[	Cu	63	50.895	ug/L	1.372	2	185	253317	1
[	Cu	65	50.474	ug/L	1.012	2	78	121400	0
[	Zn	66	51.273	ug/L	1.304	2	327	77241	0
[	Zn	67	50.747	ug/L	1.790	3	127	13239	1
[	Zn	68	49.913	ug/L	0.279	0	6722	61052	1
[	As	75	50.379	ug/L	0.823	1	237	83679	0
[	As-1	75	50.404	ug/L	1.030	2	7657	89732	0
[	Se	82	50.687	ug/L	0.969	1	-3	8997	0
[	Se	78	50.765	ug/L	1.637	3	7753	29277	0
[	Mo	98	50.253	ug/L	0.922	1	298	308199	0
	Y	89		ug/L			265659	273654	0
	Kr	83		ug/L			145	155	2
[>	In	115		ug/L			296249	299647	0
[	Ag	107	50.285	ug/L	0.517	1	18	489650	1
[	Cd	111	50.471	ug/L	0.850	1	145	126980	1
[	Cd	114	50.391	ug/L	0.306	0	20	292593	1
[	Sb	121	50.458	ug/L	0.212	0	20	445609	0
[	Sb	123	50.842	ug/L	0.164	0	8	341038	0
[	Ba	135	50.223	ug/L	0.288	0	26	106197	0
[	Ba	137	50.330	ug/L	0.804	1	36	184512	0
[>	Tb	159		ug/L			387742	397728	0
[	Tl	205	49.255	ug/L	0.340	0	95	1420385	0
[	Pb	208	52.016	ug/L	0.421	0	612	1976907	0
[	Bi	209		ug/L			325230	336386	1
[	Th	232	52.450	ug/L	0.112	0	429	2577421	0
[	U	238	52.388	ug/L	1.075	2	543	2931717	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 11:53:24
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			289574	290821	1
⌊	Be	9	-0.004	ug/L	0.005	110	5	4	45
	C	13		mg/L			3530	3315	1
	Cl	37		mg/L			1867713	1971487	0
⌈>	Sc	45		ug/L			207316	212637	2
|	V	51	-0.014	ug/L	0.021	147	1532	1446	15
|	V-1	51	-0.012	ug/L	0.012	96	3341	3310	0
|	Cr	52	-0.024	ug/L	0.025	103	4636	4559	4
|	Cr	53	-0.018	ug/L	0.097	548	1102	1111	6
|	Mn	55	0.006	ug/L	0.004	54	366	462	7
⌊	Co	59	0.001	ug/L	0.001	88	37	44	11
⌈>	Ge	72		ug/L			272714	282340	1
|	Ni	60	0.002	ug/L	0.003	136	62	69	8
|	Ni	62	-0.014	ug/L	0.014	98	61	59	7
|	Cu	63	-0.000	ug/L	0.002	1605	185	191	4
|	Cu	65	0.007	ug/L	0.005	70	78	98	13
|	Zn	66	-0.011	ug/L	0.014	128	327	322	7
|	Zn	67	-0.005	ug/L	0.068	1420	127	130	13
|	Zn	68	-0.256	ug/L	0.090	34	6722	6681	0
|	As	75	0.012	ug/L	0.014	113	237	265	9
|	As-1	75	-0.037	ug/L	0.059	159	7657	7867	0
|	Se	82	0.002	ug/L	0.038	1741	-3	-2	230
|	Se	78	-0.141	ug/L	0.223	157	7753	7968	0
⌊	Mo	98	-0.026	ug/L	0.005	17	298	149	17
	Y	89		ug/L			265659	272678	1
	Kr	83		ug/L			145	158	2
⌈>	In	115		ug/L			296249	302819	1
|	Ag	107	0.016	ug/L	0.003	20	18	180	16
|	Cd	111	0.004	ug/L	0.007	199	145	157	10
|	Cd	114	0.000	ug/L	0.001	347	20	22	12
|	Sb	121	0.032	ug/L	0.007	21	20	309	18
|	Sb	123	0.031	ug/L	0.007	23	8	221	21
|	Ba	135	0.005	ug/L	0.003	52	26	37	12
⌊	Ba	137	0.008	ug/L	0.001	18	36	65	6
⌈>	Tb	159		ug/L			387742	396495	1
|	Tl	205	0.009	ug/L	0.001	14	95	345	9
|	Pb	208	0.007	ug/L	0.001	16	612	873	4
|	Bi	209		ug/L			325230	340097	1
|	Th	232	0.060	ug/L	0.007	11	429	3367	9
⌊	U	238	0.004	ug/L	0.000	8	543	806	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 12:04:18
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

RR Ag, Cd, Cr, Sb, Cu

MB Only?
+MB2

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	283874	1
[	Be	9	U-0.003	ug/L	0.007	219	5	4	56
	C	13		mg/L				5191	0
	Cl	37		mg/L					0
[>	Sc	45		ug/L					1
[	V	51	1.018	ug/L	0.014	1			2
[	V-1	51	0.978	ug/L	0.014	1			2
[	Cr	52	0.146	ug/L	0.015	10			1
[	Cr	53	0.084	ug/L	0.050	59			2
[	Mn	55	4.656	ug/L	0.139	2			1
[	Co	59	0.004	ug/L	0.001	15			9
[>	Ge	72		ug/L			[illegible]		0
[	Ni	60	U 0.004	ug/L	0.002	53	62	72	7
[	Ni	62	0.011	ug/L	0.016	154	61	65	7
[	Cu	63	U 0.127	ug/L	0.003	2	185	801	2
[	Cu	65	0.123	ug/L	0.008	6	78	366	4
[	Zn	66	U 0.705	ug/L	0.036	5	327	1354	3
[	Zn	67	0.714	ug/L	0.112	15	127	307	9
[	Zn	68	0.604	ug/L	0.088	14	6722	7391	0
[	As	75	U 0.001	ug/L	0.021	1486	237	240	14
[	As-1	75	0.137	ug/L	0.055	40	7657	7910	0
[	Se	82	-0.013	ug/L	0.038	289	-3	-5	117
[	Se	78	0.534	ug/L	0.262	49	7753	8009	0
[	Mo	98	-0.021	ug/L	0.007	31	298	178	22
	Y	89		ug/L			265659	268988	0
	Kr	83		ug/L			145	149	3
[>	In	115		ug/L			296249	294976	0
[	Ag	107	0.009	ug/L	0.002	24	18	104	21
[	Cd	111	0.001	ug/L	0.003	473	145	146	4
[	Cd	114	-0.000	ug/L	0.001	139	20	18	21
[	Sb	121	0.013	ug/L	0.001	9	20	135	8
[	Sb	123	0.015	ug/L	0.002	12	8	110	11
[	Ba	135	0.136	ug/L	0.010	7	26	309	7
[	Ba	137	0.135	ug/L	0.004	2	36	522	2
[>	Tb	159		ug/L			387742	386954	0
[	Tl	205	0.007	ug/L	0.002	26	95	301	17
[	Pb	208	U 0.019	ug/L	0.002	8	612	1327	5
[	Bi	209		ug/L			325230	331749	1
[	Th	232	0.053	ug/L	0.004	7	429	2952	6
[	U	238	0.011	ug/L	0.001	11	543	1135	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 12:10:35
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

RR Ag, Cd, Cr, Sb, Cu

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	299321 ✓	2
[	Be	9	U 0.005	ug/L	0.022	436	5	7	107
	C	13		mg/L			3530	4793	2
	Cl	37		mg/L			1867713	2055568	6
[>	Sc	45		ug/L			207316	224202 ✓	2
[	V	51	0.007	ug/L	0.023	331	1532	1722	10
[	V-1	51	-0.054	ug/L	0.013	23	3341	3075	1
[	Cr	52	0.002	ug/L	0.025	1595	4636	5024	3
[	Cr	53	-0.184	ug/L	0.017	9	1102	1000	3
[	Mn	55	0.101	ug/L	0.010	9	366	1833	5
[	Co	59	-0.000	ug/L	0.000	276	37	39	8
[>	Ge	72		ug/L			272714	289833 ✓	1
[	Ni	60	U -0.005	ug/L	0.001	20	62	54	3
[	Ni	62	-0.067	ug/L	0.009	12	61	42	5
[	Cu	63	U 0.134	ug/L	0.001	1	185	881	1
[	Cu	65	0.138	ug/L	0.007	4	78	423	3
[	Zn	66	U 0.872	ug/L	0.038	4	327	1689	2
[	Zn	67	0.863	ug/L	0.075	8	127	364	6
[	Zn	68	0.480	ug/L	0.159	33	6722	7675	1
[	As	75	U -0.003	ug/L	0.018	656	237	247	13
[	As-1	75	-0.115	ug/L	0.032	28	7657	7945	0
[	Se	82	0.011	ug/L	0.059	556	-3	-1	730
[	Se	78	-0.423	ug/L	0.136	32	7753	8058	0
[	Mo	98	-0.035	ug/L	0.005	13	298	96	30
	Y	89		ug/L			265659	286013	1
	Kr	83		ug/L			145	154	7
[>	In	115		ug/L			296249	311551 ✓	0
[	Ag	107	0.005	ug/L	0.001	16	18	72	11
[	Cd	111	0.010	ug/L	0.003	34	145	178	5
[	Cd	114	-0.001	ug/L	0.000	30	20	13	17
[	Sb	121	0.007	ug/L	0.001	18	20	87	14
[	Sb	123	0.008	ug/L	0.003	35	8	62	30
[	Ba	135	0.646	ug/L	0.023	3	26	1447	2
[	Ba	137	0.657	ug/L	0.016	2	36	2542	2
[>	Tb	159		ug/L			387742	407237 ✓	2
[	Tl	205	0.003	ug/L	0.001	19	95	200	11
[	Pb	208	U 0.007	ug/L	0.002	20	612	930	7
[	Bi	209		ug/L			325230	349724	2
[	Th	232	0.033	ug/L	0.001	2	429	2091	0
[	U	238	0.008	ug/L	0.001	12	543	1021	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 12:16:52
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

RR Ag, Cd, Cr, Sb, Cu

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	294645 ✓	1
[	Be	9	24.394	ug/L	0.191	0	5	9493	1
	C	13		mg/L			3530	5177	1
	Cl	37		mg/L			1867713	2066838	7
[>	Sc	45		ug/L			207316	218019 ✓	1
[	V	51	25.963	ug/L	0.197	0	1532	246721	1
[	V-1	51	25.862	ug/L	0.075	0	3341	253114	1
[	Cr	52	25.957	ug/L	0.209	0	4636	222633	1
[	Cr	53	25.651	ug/L	0.198	0	1102	27202	0
[	Mn	55	26.397	ug/L	0.235	0	366	367446	1
[	Co	59	26.148	ug/L	0.225	0	37	276945	0
[>	Ge	72		ug/L			272714	288940 ✓	1
[	Ni	60	25.548	ug/L	0.525	2	62	58770	0
[	Ni	62	25.913	ug/L	0.150	0	61	8947	0
[	Cu	63	26.719	ug/L	0.227	0	185	136065	0
[	Cu	65	26.853	ug/L	0.540	2	78	66070	0
[	Zn	66	82.537	ug/L	0.122	0	327	126933	1
[	Zn	67	74.286	ug/L	1.305	1	127	19755	0
[	Zn	68	79.401	ug/L	0.795	1	6722	95072	0
[	As	75	26.774	ug/L	0.278	1	237	45585	0
[	As-1	75	25.414	ug/L	0.466	1	7657	50277	0
[	Se	82	80.855	ug/L	0.538	0	-3	14675	0
[	Se	78	79.787	ug/L	1.303	1	7753	42352	0
[	Mo	98	23.754	ug/L	0.200	0	298	149113	0
	Y	89		ug/L			265659	284452	2
	Kr	83		ug/L			145	159	6
[>	In	115		ug/L			296249	311771 ✓	2
[	Ag	107	25.123	ug/L	0.723	2	18	254445	0
[	Cd	111	24.465	ug/L	0.405	1	145	64111	1
[	Cd	114	24.144	ug/L	0.640	2	20	145818	0
[	Sb	121	23.514	ug/L	0.638	2	20	215997	0
[	Sb	123	23.424	ug/L	0.753	3	8	163416	1
[	Ba	135	25.230	ug/L	0.308	1	26	55514	0
[	Ba	137	25.183	ug/L	0.549	2	36	96056	0
[>	Tb	159		ug/L			387742	407104 ✓	0
[	Tl	205	25.174	ug/L	0.033	0	95	743114	0
[	Pb	208	26.517	ug/L	0.260	0	612	1031862	0
[	Bi	209		ug/L			325230	346591	1
[	Th	232	24.613	ug/L	0.134	0	429	1238234	0
[	U	238	24.007	ug/L	0.568	2	543	1375422	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 12:23:09
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

RR Ag, Cd, Cr, Sb, Cu

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	293033 ✓	2
[	Be	9	24.175	ug/L	0.595	2	5	9353	0
	C	13		mg/L			3530	4787	2
	Cl	37		mg/L			1867713	1990822	0
[>	Sc	45		ug/L			207316	218315 ✓	2
[	V	51	25.415	ug/L	0.784	3	1532	241760	1
[	V-1	51	25.349	ug/L	0.702	2	3341	248402	0
[	Cr	52	25.252	ug/L	0.603	2	4636	216940	0
[	Cr	53	25.062	ug/L	0.295	1	1102	26638	0
[	Mn	55	25.483	ug/L	0.489	1	366	355113	0
[	Co	59	25.703	ug/L	0.593	2	37	272543	1
[>	Ge	72		ug/L			272714	284003 ✓	1
[	Ni	60	25.488	ug/L	0.588	2	62	57633	1
[	Ni	62	25.847	ug/L	0.401	1	61	8773	1
[	Cu	63	27.336	ug/L	0.492	1	185	136820	0
[	Cu	65	27.291	ug/L	0.281	1	78	66004	0
[	Zn	66	83.805	ug/L	0.798	0	327	126669	0
[	Zn	67	74.339	ug/L	0.511	0	127	19433	0
[	Zn	68	79.067	ug/L	1.016	1	6722	93085	0
[	As	75	26.565	ug/L	0.311	1	237	44465	2
[	As-1	75	25.510	ug/L	0.152	0	7657	49583	1
[	Se	82	80.142	ug/L	0.166	0	-3	14298	1
[	Se	78	80.192	ug/L	0.602	0	7753	41801	0
[	Mo	98	23.873	ug/L	0.388	1	298	147297	1
	Y	89		ug/L			265659	277985	0
	Kr	83		ug/L			145	152	2
[>	In	115		ug/L			296249	307782 ✓	1
[	Ag	107	25.216	ug/L	0.403	1	18	252184	0
[	Cd	111	24.209	ug/L	0.469	1	145	62634	1
[	Cd	114	24.046	ug/L	0.192	0	20	143410	0
[	Sb	121	23.370	ug/L	0.515	2	20	211958	0
[	Sb	123	23.346	ug/L	0.312	1	8	160835	0
[	Ba	135	25.141	ug/L	0.635	2	26	54606	1
[	Ba	137	25.034	ug/L	0.211	0	36	94292	1
[>	Tb	159		ug/L			387742	400617 ✓	0
[	Tl	205	24.972	ug/L	0.269	1	95	725409	1
[	Pb	208	26.549	ug/L	0.253	0	612	1016619	0
[	Bi	209		ug/L			325230	343067	0
[	Th	232	24.305	ug/L	0.561	2	429	1203133	1
[	U	238	23.718	ug/L	0.477	2	543	1337178	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR65 B SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, November 27, 2012 12:29:28
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	286563	2
[	Be	9	0.051	ug/L	0.011	20	5	25	18
	C	13		mg/L			3530	4721	3
	Cl	37		mg/L			1867713	2072880	7
[>	Sc	45		ug/L			207316	251156	3
[	V	51	44.434	ug/L	1.329	2	1532	485283	5
[	V-1	51	43.564	ug/L	1.309	3	3341	488575	5
[	Cr	52	7.587	ug/L	0.117	1	4636	78957	4
[	Cr	53	7.388	ug/L	0.213	2	1102	9974	3
[	Mn	55	169.607	ug/L	5.363	3	366	2715855	2
[	Co	59	0.772	ug/L	0.013	1	37	9464	4
[>	Ge	72		ug/L			272714	298943	1
[	Ni	60	1.254	ug/L	0.050	4	62	3052	5
[	Ni	62	6.545	ug/L	0.356	5	61	2389	5
[	Cu	63	181.891	ug/L	5.305	2	185	957514	4
[	Cu	65	181.845	ug/L	5.829	3	78	462624	4
[	Zn	66	129.381	ug/L	3.679	2	327	205719	4
[	Zn	67	124.595	ug/L	4.756	3	127	34204	5
[	Zn	68	129.252	ug/L	5.769	4	6722	155570	5
[	As	75	0.993	ug/L	0.091	9	237	2001	9
[	As-1	75	0.583	ug/L	0.116	19	7657	9395	3
[	Se	82	9.585	ug/L	0.516	5	-3	1797	6
[	Se	78	8.696	ug/L	0.573	6	7753	12351	3
[	Mo	98	15.405	ug/L	0.545	3	298	100210	5
	Y	89		ug/L			265659	299669	3
	Kr	83		ug/L			145	164	3
[>	In	115		ug/L			296249	375233	1
[	Ag	107	2.125	ug/L	0.062	2	18	25944	3
[	Cd	111	0.067	ug/L	0.010	14	145	395	8
[	Cd	114	0.079	ug/L	0.005	5	20	604	6
[	Sb	121	0.018	ug/L	0.003	17	20	224	15
[	Sb	123	0.016	ug/L	0.005	28	8	146	26
[	Ba	135	203.272	ug/L	4.529	2	26	538222	3
[	Ba	137	199.715	ug/L	3.272	1	36	916871	2
[>	Tb	159		ug/L			387742	412072	0
[	Tl	205	0.787	ug/L	0.027	3	95	23603	4
[	Pb	208	36.575	ug/L	1.292	3	612	1440635	4
[	Bi	209		ug/L			325230	445418	2
[	Th	232	0.561	ug/L	0.042	7	429	29014	8
[	U	238	0.234	ug/L	0.011	4	543	14128	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT20 A REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, November 27, 2012 12:35:47
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	266037	0
[	Be	9	0.003	ug/L	0.006	243	5	6	34
	C	13		mg/L			3530	3709	4
	Cl	37		mg/L			1867713	2273941	0
[>	Sc	45		ug/L			207316	198656	1
[	V	51	1.243	ug/L	0.038	3	1532	12156	1
[	V-1	51	1.232	ug/L	0.042	3	3341	14029	0
[	Cr	52	2.701	ug/L	0.096	3	4636	25077	1
[	Cr	53	2.570	ug/L	0.103	3	1102	3432	0
[	Mn	55	37.252	ug/L	1.074	2	366	472160	0
[	Co	59	0.440	ug/L	0.005	1	37	4278	1
[>	Ge	72		ug/L			272714	265090	1
[	Ni	60	2.867	ug/L	0.108	3	62	6104	2
[	Ni	62	3.079	ug/L	0.219	7	61	1028	6
[	Cu	63	14.980	ug/L	0.420	2	185	70062	1
[	Cu	65	14.977	ug/L	0.220	1	78	33844	1
[	Zn	66	172.680	ug/L	2.700	1	327	243275	0
[	Zn	67	149.647	ug/L	2.846	1	127	36386	1
[	Zn	68	164.808	ug/L	5.972	3	6722	174004	2
[	As	75	0.239	ug/L	0.013	5	237	601	3
[	As-1	75	0.532	ug/L	0.030	5	7657	8252	1
[	Se	82	-0.007	ug/L	0.064	904	-3	-4	245
[	Se	78	1.221	ug/L	0.127	10	7753	8016	1
[	Mo	98	1.419	ug/L	0.035	2	298	8448	2
	Y	89		ug/L			265659	262711	1
	Kr	83		ug/L			145	159	2
[>	In	115		ug/L			296249	287752	2
[	Ag	107	0.031	ug/L	0.002	7	18	305	8
[	Cd	111	0.347	ug/L	0.038	10	145	977	8
[	Cd	114	0.339	ug/L	0.005	1	20	1910	2
[	Sb	121	0.370	ug/L	0.008	2	20	3160	2
[	Sb	123	0.358	ug/L	0.003	0	8	2316	1
[	Ba	135	7.837	ug/L	0.213	2	26	15929	0
[	Ba	137	7.775	ug/L	0.283	3	36	27393	2
[>	Tb	159		ug/L			387742	370140	1
[	Tl	205	0.005	ug/L	0.001	17	95	225	10
[	Pb	208	17.287	ug/L	0.259	1	612	611844	2
[	Bi	209		ug/L			325230	320006	1
[	Th	232	0.038	ug/L	0.002	6	429	2152	6
[	U	238	0.017	ug/L	0.002	10	543	1423	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 12:42:06
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

RR Ag, Cd, Cr, Sb

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	268992	1
[	Be	9	0.141	ug/L	0.028	19	5	55	17
	C	13		mg/L			3530	8920	2
	Cl	37		mg/L			1867713	5266524	4
[>	Sc	45		ug/L			207316	334717	5
[	V	51	109.005	ug/L	2.730	2	1532	1582705	6
[	V-1	51	107.565	ug/L	2.616	2	3341	1599575	6
[	Cr	52	12.323	ug/L	0.239	1	4636	166134	4
[	Cr	53	14.362	ug/L	0.022	0	1102	24167	5
[	Mn	55	503.611	ug/L	9.459	1	366	10746190	3
[	Co	59	0.414	ug/L	0.006	1	37	6793	4
[>	Ge	72		ug/L			272714	301498	2
[	Ni	60	2.096	ug/L	0.033	1	62	5096	3
[	Ni	62	3.831	ug/L	0.165	4	61	1439	5
[	Cu	63	8.595	ug/L	0.238	2	185	45828	4
[	Cu	65	6.439	ug/L	0.092	1	78	16601	3
[	Zn	66	2.628	ug/L	0.031	1	327	4568	2
[	Zn	67	16.851	ug/L	0.258	1	127	4784	0
[	Zn	68	3.238	ug/L	0.177	5	6722	11177	3
[	As	75	1.504	ug/L	0.030	2	237	2920	3
[	As-1	75	1.324	ug/L	0.044	3	7657	10757	1
[	Se	82	1.086	ug/L	0.028	2	-3	202	1
[	Se	78	0.685	ug/L	0.127	18	7753	8877	1
[	Mo	98	0.985	ug/L	0.010	1	298	6769	2
	Y	89		ug/L			265659	472437	2
	Kr	83		ug/L			145	218	6
[>	In	115		ug/L			296249	310773	3
[	Ag	107	0.081	ug/L	0.001	0	18	840	4
[	Cd	111	0.036	ug/L	0.046	126	145	247	50
[	Cd	114	0.014	ug/L	0.001	6	20	106	1
[	Sb	121	0.163	ug/L	0.006	3	20	1508	0
[	Sb	123	0.160	ug/L	0.007	4	8	1121	6
[	Ba	135	17.326	ug/L	0.487	2	26	37991	1
[	Ba	137	17.344	ug/L	0.261	1	36	65952	2
[>	Tb	159		ug/L			387742	399745	1
[	Tl	205	0.007	ug/L	0.001	14	95	303	10
[	Pb	208	1.483	ug/L	0.011	0	612	57248	1
[	Bi	209		ug/L			325230	312542	0
[	Th	232	0.446	ug/L	0.012	2	429	22447	1
[	U	238	0.146	ug/L	0.001	0	543	8780	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 12:48:24
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

RR Ag, Cd, Cr, Sb

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	270301	3
[	Be	9	0.149	ug/L	0.006	4	5	58	5
	C	13		mg/L			3530	9234	2
	Cl	37		mg/L			1867713	5560426	2
[>	Sc	45		ug/L			207316	352999	5
[	V	51	111.471	ug/L	3.756	3	1532	1704373	2
[	V-1	51	110.199	ug/L	3.675	3	3341	1725621	2
[	Cr	52	12.184	ug/L	0.402	3	4636	173220	3
[	Cr	53	14.909	ug/L	0.313	2	1102	26368	3
[	Mn	55	508.396	ug/L	13.336	2	366	11435314	3
[	Co	59	0.431	ug/L	0.009	2	37	7443	4
[>	Ge	72		ug/L			272714	310004	3
[	Ni	60	2.116	ug/L	0.024	1	62	5287	2
[	Ni	62	4.496	ug/L	0.227	5	61	1723	5
[	Cu	63	8.827	ug/L	0.052	0	185	48380	4
[	Cu	65	6.457	ug/L	0.162	2	78	17108	2
[	Zn	66	2.875	ug/L	0.120	4	327	5098	1
[	Zn	67	18.005	ug/L	0.574	3	127	5249	5
[	Zn	68	3.275	ug/L	0.169	5	6722	11531	3
[	As	75	1.479	ug/L	0.014	0	237	2955	2
[	As-1	75	1.354	ug/L	0.158	11	7657	11107	1
[	Se	82	1.046	ug/L	0.098	9	-3	199	8
[	Se	78	0.798	ug/L	0.623	78	7753	9173	0
[	Mo	98	0.963	ug/L	0.029	2	298	6810	2
	Y	89		ug/L			265659	487101	2
	Kr	83		ug/L			145	214	3
[>	In	115		ug/L			296249	324504	3
[	Ag	107	0.075	ug/L	0.004	5	18	813	5
[	Cd	111	-0.120	ug/L	0.072	59	145	-171	118
[	Cd	114	0.012	ug/L	0.003	24	20	101	21
[	Sb	121	0.156	ug/L	0.006	3	20	1510	0
[	Sb	123	0.156	ug/L	0.006	3	8	1140	2
[	Ba	135	17.067	ug/L	0.211	1	26	39091	2
[	Ba	137	16.784	ug/L	0.231	1	36	66648	2
[>	Tb	159		ug/L			387742	397317	2
[	Tl	205	0.006	ug/L	0.001	17	95	285	14
[	Pb	208	1.448	ug/L	0.021	1	612	55557	2
[	Bi	209		ug/L			325230	307130	3
[	Th	232	0.395	ug/L	0.009	2	429	19811	1
[	U	238	0.147	ug/L	0.005	3	543	8755	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 12:54:41
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

GL 11-28-12
RR ~~Ag, Cd, Cr, Sb~~
All ex Pb, Be

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	297151	2
[	Be	9	25.252	ug/L	0.431	1	5	9908	1
	C	13		mg/L			3530	9692	2
	Cl	37		mg/L			1867713	6064327	1
[>	Sc	45		ug/L			207316	416812	3
[	V	51	136.885	ug/L	1.589	1	1532	2472882	2
[	V-1	51	135.449	ug/L	1.454	1	3341	2505258	2
[	Cr	52	28.964	ug/L	0.421	1	4636	473670	2
[	Cr	53	31.764	ug/L	0.464	1	1102	63878	4
[	Mn	55	509.905	ug/L	7.361	1	366	13552031	2
[	Co	59	17.245	ug/L	0.367	2	37	349077	2
[>	Ge	72		ug/L			272714	340618	3
[	Ni	60	28.633	ug/L	0.257	0	62	77633	3
[	Ni	62	31.312	ug/L	0.677	2	61	12725	2
[	Cu	63	35.456	ug/L	0.406	1	185	212733	2
[	Cu	65	32.174	ug/L	0.742	2	78	93259	1
[	Zn	66	79.985	ug/L	1.868	2	327	144934	1
[	Zn	67	90.527	ug/L	1.067	1	127	28340	2
[	Zn	68	77.117	ug/L	1.791	2	6722	109039	1
[	As	75	27.368	ug/L	0.882	3	237	54880	0
[	As-1	75	25.762	ug/L	0.907	3	7657	59912	1
[	Se	82	75.710	ug/L	1.709	2	-3	16190	1
[	Se	78	73.442	ug/L	2.066	2	7753	46708	2
[	Mo	98	26.025	ug/L	0.661	2	298	192440	1
	Y	89		ug/L			265659	542881	3
	Kr	83		ug/L			145	226	2
[>	In	115		ug/L			296249	364490	3
[	Ag	107	23.939	ug/L	0.597	2	18	283398	1
[	Cd	111	23.211	ug/L	0.440	1	145	71102	2
[	Cd	114	23.095	ug/L	0.578	2	20	163067	2
[	Sb	121	22.294	ug/L	0.595	2	20	239345	1
[	Sb	123	22.071	ug/L	0.547	2	8	179981	1
[	Ba	135	40.136	ug/L	0.767	1	26	103199	2
[	Ba	137	39.895	ug/L	0.723	1	36	177860	2
[>	Tb	159		ug/L			387742	444173	3
[	Tl	205	22.463	ug/L	0.271	1	95	723261	2
[	Pb	208	25.044	ug/L	0.461	1	612	1062892	1
[	Bi	209		ug/L			325230	341005	3
[	Th	232	22.445	ug/L	0.612	2	429	1231247	1
[	U	238	22.290	ug/L	0.447	2	543	1392775	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 13:01:00
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

RR AM Re. Be, Pb

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	284584	0
[	Be	9	U0.153	ug/L	0.017	11	5	63	10
	C	13		mg/L			3530	10286	1
	Cl	37		mg/L			1867713	7251852	0
[>	Sc	45		ug/L			207316	390601	1
[	V	51	43.003	ug/L	0.247	0	1532	730227	1
[	V-1	51	43.467	ug/L	0.275	0	3341	757888	1
[	Cr	52	9.284	ug/L	0.027	0	4636	148276	1
[	Cr	53	12.933	ug/L	0.244	1	1102	25601	1
[	Mn	55	1212.924	ug/L	5.187	0	366	30216774	1
[	Co	59	0.620	ug/L	0.003	0	37	11833	1
[>	Ge	72		ug/L			272714	339723	0
[	Ni	60	2.567	ug/L	0.050	1	62	7014	0
[	Ni	62	4.680	ug/L	0.124	2	61	1963	3
[	Cu	63	6.720	ug/L	0.081	1	185	40414	1
[	Cu	65	3.787	ug/L	0.115	3	78	11039	2
[	Zn	66	3.171	ug/L	0.097	3	327	6125	2
[	Zn	67	11.394	ug/L	0.102	0	127	3697	0
[	Zn	68	3.848	ug/L	0.201	5	6722	13383	1
[	As	75	1.693	ug/L	0.020	1	237	3665	1
[	As-1	75	0.736	ug/L	0.073	9	7657	10975	0
[	Se	82	2.368	ug/L	0.139	5	-3	501	5
[	Se	78	-0.975	ug/L	0.303	31	7753	9167	0
[	Mo	98	0.634	ug/L	0.017	2	298	5043	2
	Y	89		ug/L			265659	431502	1
	Kr	83		ug/L			145	241	7
[>	In	115		ug/L			296249	361542	1
[	Ag	107	0.057	ug/L	0.004	6	18	696	7
[	Cd	111	-0.320	ug/L	0.070	22	145	-792	27
[	Cd	114	0.008	ug/L	0.002	28	20	83	21
[	Sb	121	0.118	ug/L	0.007	5	20	1278	5
[	Sb	123	0.120	ug/L	0.006	4	8	984	3
[	Ba	135	32.170	ug/L	0.292	0	26	82083	1
[	Ba	137	31.643	ug/L	0.215	0	36	139995	1
[>	Tb	159		ug/L			387742	415517	1
[	Tl	205	0.030	ug/L	0.008	24	95	1021	24
[	Pb	208	0.379	ug/L	0.003	0	612	15699	1
[	Bi	209		ug/L			325230	315559	1
[	Th	232	0.211	ug/L	0.005	2	429	11283	4
[	U	238	0.067	ug/L	0.002	2	543	4489	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 13:07:18
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	263790	4
[	Be	9	52.013	ug/L	1.174	2	5	18104	2
	C	13		mg/L			3530	3979	0
	Cl	37		mg/L			1867713	2638372	0
[>	Sc	45		ug/L			207316	258259	2
[	V	51	51.879	ug/L	0.659	1	1532	582156	3
[	V-1	51	52.374	ug/L	0.399	0	3341	602974	2
[	Cr	52	50.720	ug/L	0.878	1	4636	509778	2
[	Cr	53	52.301	ug/L	1.187	2	1102	64262	1
[	Mn	55	50.950	ug/L	0.139	0	366	839691	2
[	Co	59	52.980	ug/L	0.117	0	37	664693	1
[>	Ge	72		ug/L			272714	320899	2
[	Ni	60	54.315	ug/L	1.648	3	62	138654	2
[	Ni	62	54.533	ug/L	1.264	2	61	20830	2
[	Cu	63	55.158	ug/L	0.785	1	185	311712	2
[	Cu	65	53.991	ug/L	1.033	1	78	147437	1
[	Zn	66	54.707	ug/L	1.041	1	327	93551	1
[	Zn	67	53.967	ug/L	0.497	0	127	15980	1
[	Zn	68	52.957	ug/L	0.382	0	6722	73068	2
[	As	75	50.682	ug/L	0.705	1	237	95580	1
[	As-1	75	50.692	ug/L	0.752	1	7657	102416	1
[	Se	82	50.192	ug/L	1.190	2	-3	10114	1
[	Se	78	50.237	ug/L	1.429	2	7753	32991	1
[	Mo	98	52.563	ug/L	0.534	1	298	366004	1
	Y	89		ug/L			265659	314386	2
	Kr	83		ug/L			145	193	2
[>	In	115		ug/L			296249	360386	1
[	Ag	107	51.079	ug/L	0.414	0	18	598248	1
[	Cd	111	50.255	ug/L	0.450	0	145	152072	0
[	Cd	114	49.809	ug/L	0.117	0	20	347839	1
[	Sb	121	48.928	ug/L	0.348	0	20	519671	0
[	Sb	123	48.866	ug/L	0.434	0	8	394214	0
[	Ba	135	46.312	ug/L	0.634	1	26	117781	1
[	Ba	137	45.952	ug/L	0.368	0	36	202641	1
[>	Tb	159		ug/L			387742	403496	1
[	Tl	205	48.214	ug/L	0.773	1	95	1410638	2
[	Pb	208	50.341	ug/L	0.556	1	612	1941189	2
[	Bi	209		ug/L			325230	332014	2
[	Th	232	50.220	ug/L	0.268	0	429	2503763	1
[	U	238	48.902	ug/L	0.269	0	543	2776480	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 13:13:56
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	226643	0
[	Be	9	-0.003	ug/L	0.000	2	5	3	
	C	13		mg/L			3530	3745	0
	Cl	37		mg/L			1867713	2596388	0
[>	Sc	45		ug/L			207316	223892	0
[	V	51	-0.028	ug/L	0.040	146	1532	1386	27
[	V-1	51	0.409	ug/L	0.058	14	3341	7663	6
[	Cr	52	0.018	ug/L	0.009	51	4636	5160	0
[	Cr	53	1.343	ug/L	0.125	9	1102	2590	4
[	Mn	55	0.039	ug/L	0.001	3	366	959	1
[	Co	59	0.000	ug/L	0.000	68	37	45	6
[>	Ge	72		ug/L			272714	288330	1
[	Ni	60	0.005	ug/L	0.005	98	62	77	13
[	Ni	62	0.294	ug/L	0.027	9	61	165	4
[	Cu	63	0.071	ug/L	0.006	8	185	558	5
[	Cu	65	0.007	ug/L	0.006	91	78	100	15
[	Zn	66	0.026	ug/L	0.013	49	327	385	4
[	Zn	67	0.446	ug/L	0.054	12	127	252	6
[	Zn	68	0.590	ug/L	0.078	13	6722	7759	2
[	As	75	0.061	ug/L	0.014	22	237	353	7
[	As-1	75	0.597	ug/L	0.053	8	7657	9083	0
[	Se	82	0.095	ug/L	0.076	80	-3	13	99
[	Se	78	2.278	ug/L	0.263	11	7753	9170	0
[	Mo	98	-0.038	ug/L	0.003	7	298	75	22
	Y	89		ug/L			265659	277301	0
	Kr	83		ug/L			145	172	2
[>	In	115		ug/L			296249	330535	1
[	Ag	107	0.007	ug/L	0.003	41	18	97	33
[	Cd	111	0.011	ug/L	0.007	65	145	192	9
[	Cd	114	-0.002	ug/L	0.001	87	20	13	67
[	Sb	121	0.020	ug/L	0.006	32	20	215	30
[	Sb	123	0.020	ug/L	0.009	42	8	158	41
[	Ba	135	0.007	ug/L	0.001	15	26	45	5
[	Ba	137	0.004	ug/L	0.002	42	36	55	11
[>	Tb	159		ug/L			387742	361044	1
[	Tl	205	0.008	ug/L	0.002	18	95	305	14
[	Pb	208	0.004	ug/L	0.002	42	612	724	10
[	Bi	209		ug/L			325230	297684	0
[	Th	232	0.029	ug/L	0.005	17	429	1684	14
[	U	238	0.002	ug/L	0.000	14	543	620	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 13:46:40
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

RR Dil ex, Be Pb

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	229464	3
[	Be	9	u0.062	ug/L	0.003	5	5	23	6
	C	13		mg/L			3530	8571	0
	Cl	37		mg/L			1867713	2859867	1
[>	Sc	45		ug/L			207316	316748	2
[	V	51	9.055	ug/L	0.250	2	1532	126466	0
[	V-1	51	9.155	ug/L	0.305	3	3341	133389	0
[	Cr	52	4.039	ug/L	0.119	2	4636	56288	1
[	Cr	53	4.677	ug/L	0.287	6	1102	8574	1
[	Mn	55	3198.145	ug/L	44.180	1	366	64604607	2
[	Co	59	1.702	ug/L	0.023	1	37	26239	1
[>	Ge	72		ug/L			272714	298234	2
[	Ni	60	7.661	ug/L	0.069	0	62	18239	1
[	Ni	62	8.232	ug/L	0.140	1	61	2979	1
[	Cu	63	4.203	ug/L	0.063	1	185	22262	1
[	Cu	65	3.297	ug/L	0.122	3	78	8445	1
[	Zn	66	11.498	ug/L	0.324	2	327	18552	0
[	Zn	67	13.125	ug/L	0.251	1	127	3716	0
[	Zn	68	13.292	ug/L	0.276	2	6722	22545	1
[	As	75	6.751	ug/L	0.159	2	237	12055	0
[	As-1	75	6.231	ug/L	0.233	3	7657	19040	0
[	Se	82	3.698	ug/L	0.118	3	-3	689	3
[	Se	78	1.701	ug/L	0.291	17	7753	9229	0
[	Mo	98	0.477	ug/L	0.023	4	298	3407	2
	Y	89		ug/L			265659	333988	0
	Kr	83		ug/L			145	204	3
[>	In	115		ug/L			296249	318657	0
[	Ag	107	0.034	ug/L	0.001	2	18	375	1
[	Cd	111	0.018	ug/L	0.014	77	145	203	18
[	Cd	114	0.044	ug/L	0.003	7	20	293	6
[	Sb	121	0.494	ug/L	0.005	1	20	4665	0
[	Sb	123	0.497	ug/L	0.011	2	8	3552	1
[	Ba	135	51.221	ug/L	0.845	1	26	115170	0
[	Ba	137	50.996	ug/L	0.875	1	36	198816	1
[>	Tb	159		ug/L			387742	365567	2
[	Tl	205	0.010	ug/L	0.002	17	95	342	11
[	Pb	208	13.539	ug/L	0.227	1	612	473272	0
[	Bi	209		ug/L			325230	281349	1
[	Th	232	0.168	ug/L	0.026	15	429	7968	13
[	U	238	0.042	ug/L	0.004	10	543	2684	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 13:52:57
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

2R AAL ex Be, Pb

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			289574	248533	5
[	**Be**	**9**	**0.028**	ug/L	0.010	34	5	14	18
	C	**13**		mg/L			3530	8166	3
	Cl	**37**		mg/L			1867713	22437201	4
[>	**Sc**	**45**		ug/L			207316	315866	6
[	**V**	**51**	**12.827**	ug/L	0.079	0	1532	177774	6
[	**V-1**	**51**	**18.108**	ug/L	0.277	1	3341	258206	6
[	**Cr**	**52**	**2.675**	ug/L	0.073	2	4636	39549	5
[	**Cr**	**53**	**19.402**	ug/L	0.718	3	1102	30191	5
[	**Mn**	**55**	**327.692**	ug/L	3.130	0	366	6600649	6
[	**Co**	**59**	**0.241**	ug/L	0.007	2	37	3745	4
[>	**Ge**	**72**		ug/L			272714	266666	4
[	**Ni**	**60**	**3.861**	ug/L	0.118	3	62	8259	7
[	**Ni**	**62**	**15.814**	ug/L	2.475	15	61	5046	12
[	**Cu**	**63**	**12.659**	ug/L	0.219	1	185	59578	3
[	**Cu**	**65**	**0.995**	ug/L	0.017	1	78	2334	5
[	**Zn**	**66**	**3.715**	ug/L	0.039	1	327	5579	5
[	**Zn**	**67**	**8.828**	ug/L	0.604	6	127	2274	5
[	**Zn**	**68**	**5.429**	ug/L	0.457	8	6722	12110	1
[	**As**	**75**	**3.633**	ug/L	0.031	0	237	5911	5
[	**As-1**	**75**	**0.890**	ug/L	0.179	20	7657	8842	1
[	**Se**	**82**	**11.750**	ug/L	0.206	1	-3	1966	6
[	**Se**	**78**	**3.268**	ug/L	0.710	21	7753	8863	1
[	**Mo**	**98**	**0.288**	ug/L	0.012	4	298	1958	7
	Y	**89**		ug/L			265659	313937	4
	Kr	**83**		ug/L			145	374	0
[>	**In**	**115**		ug/L			296249	283004	5
[	**Ag**	**107**	**0.025**	ug/L	0.001	4	18	243	8
[	**Cd**	**111**	**-1.677**	ug/L	0.166	9	145	-3855	15
[	**Cd**	**114**	**0.010**	ug/L	0.003	25	20	74	13
[	**Sb**	**121**	**0.240**	ug/L	0.004	1	20	2021	3
[	**Sb**	**123**	**0.241**	ug/L	0.005	1	8	1531	3
[	**Ba**	**135**	**44.018**	ug/L	0.440	1	26	87915	5
[	**Ba**	**137**	**43.812**	ug/L	0.840	1	36	151738	5
[>	**Tb**	**159**		ug/L			387742	341242	4
[	**Tl**	**205**	**0.002**	ug/L	0.001	27	95	140	15
[	**Pb**	**208**	**0.590**	ug/L	0.011	1	612	19770	5
[	**Bi**	**209**		ug/L			325230	247296	4
[	**Th**	**232**	**0.030**	ug/L	0.004	13	429	1659	14
[	**U**	**238**	**0.062**	ug/L	0.003	4	543	3452	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS36 C REN
Sample Dil Factor: 2 Dil
Comments:
Sample Date/Time: Tuesday, November 27, 2012 13:59:14
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

RR Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	326211	0
[	Be	9	-0.006	ug/L	0.006	107	5	4	62
	C	13		mg/L			3530	6641	0
	Cl	37		mg/L			1867713	2905288	0
[>	Sc	45		ug/L			207316	311374	1
[	V	51	0.465	ug/L	0.026	5	1532	8562	3
[	V-1	51	1.220	ug/L	0.099	8	3341	21831	5
[	Cr	52	0.404	ug/L	0.009	2	4636	11808	1
[	Cr	53	2.706	ug/L	0.269	9	1102	5577	6
[	Mn	55	46.681	ug/L	0.192	0	366	927625	1
[	Co	59	0.220	ug/L	0.007	3	37	3380	2
[>	Ge	72		ug/L			272714	364949	0
[	Ni	60	1.960	ug/L	0.032	1	62	5772	1
[	Ni	62	3.004	ug/L	0.183	6	61	1382	4
[	Cu	63	12.051	ug/L	0.128	1	185	77650	0
[	Cu	65	11.612	ug/L	0.198	1	78	36149	0
[	Zn	66	47.570	ug/L	0.831	1	327	92582	1
[	Zn	67	43.271	ug/L	0.654	1	127	14606	0
[	Zn	68	44.450	ug/L	0.543	1	6722	71183	0
[	As	75	0.385	ug/L	0.039	10	237	1140	6
[	As-1	75	-0.326	ug/L	0.053	16	7657	9564	0
[	Se	82	0.170	ug/L	0.101	59	-3	34	66
[	Se	78	-2.624	ug/L	0.138	5	7753	8957	0
[	Mo	98	0.799	ug/L	0.019	2	298	6721	2
	Y	89		ug/L			265659	370285	2
	Kr	83		ug/L			145	187	1
[>	In	115		ug/L			296249	424079	3
[	Ag	107	0.004	ug/L	0.001	23	18	77	15
[	Cd	111	0.067	ug/L	0.004	6	145	444	2
[	Cd	114	0.047	ug/L	0.004	7	20	412	5
[	Sb	121	0.436	ug/L	0.009	2	20	5475	1
[	Sb	123	0.439	ug/L	0.014	3	8	4183	3
[	Ba	135	23.765	ug/L	0.548	2	26	71106	0
[	Ba	137	23.807	ug/L	0.601	2	36	123495	0
[>	Tb	159		ug/L			387742	477680	1
[	Tl	205	0.004	ug/L	0.000	4	95	244	1
[	Pb	208	0.755	ug/L	0.022	2	612	35206	1
[	Bi	209		ug/L			325230	401344	0
[	Th	232	0.008	ug/L	0.001	10	429	998	3
[	U	238	0.014	ug/L	0.001	6	543	1640	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 N RHN
Sample Dil Factor: 10 Del
Comments:
Sample Date/Time: Tuesday, November 27, 2012 14:05:31
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

RR Mn, Pb, Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	270538	3
[	Be	9	0.002	ug/L	0.003	148	5	6	20
	C	13		mg/L			3530	4386	0
	Cl	37		mg/L			1867713	2721879	0
[>	Sc	45		ug/L			207316	276725	2
[	V	51	0.052	ug/L	0.019	36	1532	2668	6
[	V-1	51	0.715	ug/L	0.101	14	3341	13199	6
[	Cr	52	0.028	ug/L	0.008	29	4636	6487	1
[	Cr	53	2.045	ug/L	0.274	13	1102	4100	5
[	Mn	55	29.689	ug/L	0.485	1	366	524344	1
[	Co	59	0.306	ug/L	0.015	4	37	4163	4
[>	Ge	72		ug/L			272714	326141	3
[	Ni	60	1.840	ug/L	0.054	2	62	4844	0
[	Ni	62	2.649	ug/L	0.162	6	61	1097	3
[	Cu	63	1.183	ug/L	0.035	2	185	7006	1
[	Cu	65	1.064	ug/L	0.046	4	78	3042	1
[	Zn	66	193.634	ug/L	3.983	2	327	335438	1
[	Zn	67	170.041	ug/L	4.850	2	127	50817	0
[	Zn	68	184.388	ug/L	3.747	2	6722	238480	1
[	As	75	0.302	ug/L	0.010	3	237	861	5
[	As-1	75	0.021	ug/L	0.177	839	7657	9189	0
[	Se	82	0.141	ug/L	0.034	23	-3	24	27
[	Se	78	-0.886	ug/L	0.719	81	7753	8836	0
[	Mo	98	0.151	ug/L	0.007	4	298	1425	4
	Y	89		ug/L			265659	319254	1
	Kr	83		ug/L			145	187	3
[>	In	115		ug/L			296249	371726	2
[	Ag	107	0.001	ug/L	0.000	36	18	30	8
[	Cd	111	0.820	ug/L	0.013	1	145	2740	3
[	Cd	114	0.806	ug/L	0.019	2	20	5832	1
[	Sb	121	0.012	ug/L	0.001	9	20	160	6
[	Sb	123	0.015	ug/L	0.002	10	8	136	11
[	Ba	135	8.492	ug/L	0.130	1	26	22300	1
[	Ba	137	8.409	ug/L	0.170	2	36	38272	0
[>	Tb	159		ug/L			387742	420543	1
[	Tl	205	0.006	ug/L	0.001	16	95	299	10
[	Pb	208	0.007	ug/L	0.001	7	612	949	1
[	Bi	209		ug/L			325230	352432	3
[	Th	232	0.003	ug/L	0.002	57	429	615	12
[	U	238	0.009	ug/L	0.002	16	543	1136	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 N RHN
Sample Dil Factor: 2 Dil
Comments: RR Mn, Pb, Zn
Sample Date/Time: Tuesday, November 27, 2012 14:11:47
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	341745	7
[	Be	9	0.009	ug/L	0.006	66	5	11	29
	C	13		mg/L			3530	5766	2
	Cl	37		mg/L			1867713	2758113	1
[>	Sc	45		ug/L			207316	398300	6
[	V	51	0.394	ug/L	0.019	4	1532	9728	4
[	V-1	51	0.606	ug/L	0.064	10	3341	17062	0
[	Cr	52	0.061	ug/L	0.014	22	4636	9829	4
[	Cr	53	0.728	ug/L	0.169	23	1102	3456	2
[	Mn	55	126.715	ug/L	0.635	0	366	3219549	6
[	Co	59	1.203	ug/L	0.015	1	37	23343	6
[>	Ge	72		ug/L			272714	358541	4
[	Ni	60	9.291	ug/L	0.168	1	62	26577	5
[	Ni	62	9.107	ug/L	0.062	0	61	3954	4
[	Cu	63	4.864	ug/L	0.117	2	185	30942	5
[	Cu	65	5.076	ug/L	0.048	0	78	15585	5
[	Zn	66	878.028	ug/L	9.873	1	327	1670934	3
[	Zn	67	767.061	ug/L	6.891	0	127	251532	3
[	Zn	68	834.911	ug/L	5.339	0	6722	1156333	4
[	As	75	1.330	ug/L	0.025	1	237	3104	3
[	As-1	75	0.677	ug/L	0.216	31	7657	11446	0
[	Se	82	0.622	ug/L	0.045	7	-3	136	11
[	Se	78	-1.972	ug/L	0.803	40	7753	9133	0
[	Mo	98	0.930	ug/L	0.015	1	298	7620	3
	Y	89		ug/L			265659	366036	6
	Kr	83		ug/L			145	187	5
[>	In	115		ug/L			296249	403708	4
[	Ag	107	0.002	ug/L	0.000	29	18	45	13
[	Cd	111	3.926	ug/L	0.037	0	145	13487	4
[	Cd	114	3.824	ug/L	0.086	2	20	29921	2
[	Sb	121	0.060	ug/L	0.003	4	20	746	9
[	Sb	123	0.063	ug/L	0.003	5	8	584	5
[	Ba	135	42.061	ug/L	0.644	1	26	119774	3
[	Ba	137	41.588	ug/L	0.280	0	36	205431	4
[>	Tb	159		ug/L			387742	473752	5
[	Tl	205	0.024	ug/L	0.002	6	95	948	11
[	Pb	208	0.030	ug/L	0.001	4	612	2083	3
[	Bi	209		ug/L			325230	390796	6
[	Th	232	0.012	ug/L	0.000	1	429	1217	6
[	U	238	0.025	ug/L	0.001	3	543	2350	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VQ39 A RHN
Sample Dil Factor: 5 Del
Comments: RR Mn
Sample Date/Time: Tuesday, November 27, 2012 14:18:04
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	303295	2
[	Be	9	0.000	ug/L	0.003	900	5	6	20
	C	13		mg/L			3530	6011	1
	Cl	37		mg/L			1867713	2716850	0
[>	Sc	45		ug/L			207316	288903	2
[	V	51	0.344	ug/L	0.027	7	1532	6436	5
[	V-1	51	0.605	ug/L	0.047	7	3341	12386	3
[	Cr	52	0.061	ug/L	0.012	19	4636	7142	2
[	Cr	53	0.874	ug/L	0.099	11	1102	2709	2
[	Mn	55	8.256	ug/L	0.137	1	366	152594	0
[	Co	59	0.111	ug/L	0.004	3	37	1611	2
[>	Ge	72		ug/L			272714	341076	0
[	Ni	60	0.408	ug/L	0.006	1	62	1185	0
[	Ni	62	1.288	ug/L	0.057	4	61	598	4
[	Cu	63	2.565	ug/L	0.034	1	185	15626	0
[	Cu	65	2.475	ug/L	0.023	0	78	7278	1
[	Zn	66	11.030	ug/L	0.071	0	327	20377	0
[	Zn	67	10.202	ug/L	0.119	1	127	3340	1
[	Zn	68	10.005	ug/L	0.137	1	6722	21489	0
[	As	75	0.875	ug/L	0.013	1	237	2044	1
[	As-1	75	0.495	ug/L	0.085	17	7657	10545	1
[	Se	82	0.056	ug/L	0.033	59	-3	7	89
[	Se	78	-1.456	ug/L	0.256	17	7753	8961	1
[	Mo	98	0.688	ug/L	0.016	2	298	5463	1
	Y	89		ug/L			265659	335964	0
	Kr	83		ug/L			145	185	6
[>	In	115		ug/L			296249	385198	0
[	Ag	107	0.003	ug/L	0.001	23	18	63	14
[	Cd	111	0.079	ug/L	0.012	15	145	443	8
[	Cd	114	0.065	ug/L	0.003	4	20	514	3
[	Sb	121	0.082	ug/L	0.002	2	20	954	2
[	Sb	123	0.080	ug/L	0.004	4	8	705	4
[	Ba	135	5.030	ug/L	0.024	0	26	13702	0
[	Ba	137	5.027	ug/L	0.032	0	36	23734	0
[>	Tb	159		ug/L			387742	438119	0
[	Tl	205	0.004	ug/L	0.001	22	95	230	11
[	Pb	208	0.109	ug/L	0.002	2	612	5237	1
[	Bi	209		ug/L			325230	372860	0
[	Th	232	0.008	ug/L	0.001	10	429	914	3
[	U	238	0.051	ug/L	0.001	1	543	3784	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 ADUP RHN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, November 27, 2012 14:24:24
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			289574	414556	2
[	**Be**	**9**	**0.015**	ug/L	0.007	48	5	16	22
	C	**13**		mg/L			3530	5108	2
	Cl	**37**		mg/L			1867713	2977717	1
[>	**Sc**	**45**		ug/L			207316	400941	2
[	**V**	**51**	**3.777**	ug/L	0.179	4	1532	68527	5
[	**V-1**	**51**	**3.753**	ug/L	0.200	5	3341	73062	5
[	**Cr**	**52**	**1.049**	ug/L	0.041	3	4636	25153	4
[	**Cr**	**53**	**1.158**	ug/L	0.112	9	1102	4292	5
[	**Mn**	**55**	**77.643**	ug/L	2.662	3	366	1985585	3
[	**Co**	**59**	**0.895**	ug/L	0.032	3	37	17497	4
[>	**Ge**	**72**		ug/L			272714	413576	1
[	**Ni**	**60**	**2.936**	ug/L	0.140	4	62	9749	4
[	**Ni**	**62**	**3.937**	ug/L	0.143	3	61	2025	3
[	**Cu**	**63**	**5.602**	ug/L	0.213	3	185	41044	3
[	**Cu**	**65**	**5.703**	ug/L	0.297	5	78	20170	4
[	**Zn**	**66**	**212.055**	ug/L	6.428	3	327	465903	2
[	**Zn**	**67**	**184.009**	ug/L	4.703	2	127	69751	2
[	**Zn**	**68**	**198.085**	ug/L	6.710	3	6722	324183	2
[	**As**	**75**	**7.382**	ug/L	0.245	3	237	18248	2
[	**As-1**	**75**	**6.490**	ug/L	0.280	4	7657	27020	1
[	**Se**	**82**	**0.179**	ug/L	0.017	9	-3	41	12
[	**Se**	**78**	**-3.980**	ug/L	0.286	7	7753	9319	0
[	**Mo**	**98**	**0.601**	ug/L	0.026	4	298	5838	3
	Y	**89**		ug/L			265659	440973	2
	Kr	**83**		ug/L			145	186	3
[>	**In**	**115**		ug/L			296249	480807	0
[	**Ag**	**107**	**0.010**	ug/L	0.001	11	18	192	10
[	**Cd**	**111**	**0.966**	ug/L	0.041	4	145	4130	4
[	**Cd**	**114**	**0.921**	ug/L	0.025	2	20	8611	2
[	**Sb**	**121**	**0.044**	ug/L	0.005	11	20	653	10
[	**Sb**	**123**	**0.043**	ug/L	0.002	5	8	472	5
[	**Ba**	**135**	**13.619**	ug/L	0.036	0	26	46238	0
[	**Ba**	**137**	**13.366**	ug/L	0.609	4	36	78680	4
[>	**Tb**	**159**		ug/L			387742	548776	1
[	**Tl**	**205**	**0.012**	ug/L	0.001	4	95	608	4
[	**Pb**	**208**	**0.634**	ug/L	0.021	3	612	34128	4
[	**Bi**	**209**		ug/L			325230	469180	1
[	**Th**	**232**	**0.043**	ug/L	0.005	12	429	3533	10
[	**U**	**238**	**0.182**	ug/L	0.006	3	543	14804	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 A RHN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, November 27, 2012 14:30:43
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	449442	7
[	Be	9	0.012	ug/L	0.001	7	5	16	7
	C	13		mg/L			3530	5311	1
	Cl	37		mg/L			1867713	3051503	1
[>	Sc	45		ug/L			207316	435025	7
[	V	51	3.781	ug/L	0.017	0	1532	74456	7
[	V-1	51	3.709	ug/L	0.009	0	3341	78430	7
[	Cr	52	1.049	ug/L	0.041	3	4636	27292	8
[	Cr	53	1.010	ug/L	0.050	4	1102	4354	5
[	Mn	55	76.376	ug/L	5.250	6	366	2127071	14
[	Co	59	0.944	ug/L	0.018	1	37	20032	8
[>	Ge	72		ug/L			272714	437463	3
[	Ni	60	3.106	ug/L	0.220	7	62	10926	10
[	Ni	62	3.904	ug/L	0.073	1	61	2126	5
[	Cu	63	5.658	ug/L	0.190	3	185	43899	7
[	Cu	65	5.590	ug/L	0.205	3	78	20934	6
[	Zn	66	215.225	ug/L	7.749	3	327	500690	7
[	Zn	67	186.285	ug/L	6.701	3	127	74760	7
[	Zn	68	200.642	ug/L	5.421	2	6722	347412	5
[	As	75	7.374	ug/L	0.163	2	237	19290	5
[	As-1	75	6.265	ug/L	0.162	2	7657	28021	3
[	Se	82	0.167	ug/L	0.022	13	-3	40	18
[	Se	78	-4.883	ug/L	0.367	7	7753	9268	1
[	Mo	98	0.622	ug/L	0.016	2	298	6383	5
	Y	89		ug/L			265659	462142	5
	Kr	83		ug/L			145	183	1
[>	In	115		ug/L			296249	500314	7
[	Ag	107	0.011	ug/L	0.000	2	18	203	9
[	Cd	111	0.981	ug/L	0.023	2	145	4358	6
[	Cd	114	0.950	ug/L	0.012	1	20	9249	8
[	Sb	121	0.042	ug/L	0.001	2	20	650	7
[	Sb	123	0.042	ug/L	0.005	12	8	479	11
[	Ba	135	13.595	ug/L	0.524	3	26	48055	9
[	Ba	137	13.632	ug/L	0.274	2	36	83510	8
[>	Tb	159		ug/L			387742	584875	8
[	Tl	205	0.012	ug/L	0.000	4	95	631	6
[	Pb	208	0.644	ug/L	0.020	3	612	36859	6
[	Bi	209		ug/L			325230	497310	6
[	Th	232	0.040	ug/L	0.002	4	429	3518	7
[	U	238	0.180	ug/L	0.006	3	543	15606	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 ASPK RHN
Sample Dil Factor: 10 Dil
Comments:
Sample Date/Time: Tuesday, November 27, 2012 14:37:02
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

RR Mn, Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	313422	0
[	Be	9	2.482	ug/L	0.017	0	5	1033	0
	C	13		mg/L			3530	4599	4
	Cl	37		mg/L			1867713	2791490	0
[>	Sc	45		ug/L			207316	304630	1
[	V	51	6.192	ug/L	0.124	1	1532	83925	1
[	V-1	51	6.284	ug/L	0.144	2	3341	89653	2
[	Cr	52	3.362	ug/L	0.004	0	4636	46223	1
[	Cr	53	3.831	ug/L	0.071	1	1102	7055	1
[	Mn	55	79.251	ug/L	4.536	5	366	1540052	5
[	Co	59	3.220	ug/L	0.034	1	37	47697	0
[>	Ge	72		ug/L			272714	346672	0
[	Ni	60	5.305	ug/L	0.152	2	62	14705	2
[	Ni	62	6.776	ug/L	0.070	1	61	2865	0
[	Cu	63	7.935	ug/L	0.132	1	185	48655	2
[	Cu	65	7.878	ug/L	0.041	0	78	23331	1
[	Zn	66	218.021	ug/L	4.616	2	327	401604	2
[	Zn	67	191.970	ug/L	2.846	1	127	61002	1
[	Zn	68	209.800	ug/L	3.127	1	6722	287380	1
[	As	75	9.926	ug/L	0.147	1	237	20467	1
[	As-1	75	9.470	ug/L	0.185	1	7657	28585	0
[	Se	82	7.723	ug/L	0.150	1	-3	1678	2
[	Se	78	5.802	ug/L	0.219	3	7753	12835	0
[	Mo	98	0.586	ug/L	0.018	3	298	4782	3
	Y	89		ug/L			265659	355541	0
	Kr	83		ug/L			145	190	5
[>	In	115		ug/L			296249	381528	0
[	Ag	107	2.279	ug/L	0.018	0	18	28278	0
[	Cd	111	3.307	ug/L	0.069	2	145	10769	1
[	Cd	114	3.290	ug/L	0.009	0	20	24351	0
[	Sb	121	0.045	ug/L	0.004	9	20	536	8
[	Sb	123	0.046	ug/L	0.002	4	8	406	4
[	Ba	135	15.976	ug/L	0.111	0	26	43035	0
[	Ba	137	15.754	ug/L	0.232	1	36	73573	1
[>	Tb	159		ug/L			387742	444674	1
[	Tl	205	2.413	ug/L	0.026	1	95	77904	0
[	Pb	208	3.129	ug/L	0.040	1	612	133604	0
[	Bi	209		ug/L			325230	374600	0
[	Th	232	1.883	ug/L	0.064	3	429	103912	2
[	U	238	2.425	ug/L	0.080	3	543	152271	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 O RHN
Sample Dil Factor: Del
Comments: RR
Sample Date/Time: Tuesday, November 27, 2012 14:43:21
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	378673	3
[	Be	9	0.010	ug/L	0.007	73	5	12	26
	C	13		mg/L			3530	7683	4
	Cl	37		mg/L			1867713	2810019	0
[>	Sc	45		ug/L			207316	379977	4
[	V	51	0.675	ug/L	0.010	1	1532	13915	5
[	V-1	51	0.710	ug/L	0.024	3	3341	18049	2
[	Cr	52	0.163	ug/L	0.016	10	4636	10880	3
[	Cr	53	0.303	ug/L	0.100	33	1102	2551	3
[	Mn	55	15.533	ug/L	0.273	1	366	376894	2
[	Co	59	0.250	ug/L	0.002	0	37	4674	3
[>	Ge	72		ug/L			272714	372637	1
[	Ni	60	1.699	ug/L	0.033	1	62	5121	1
[	Ni	62	2.223	ug/L	0.046	2	61	1066	1
[	Cu	63	17.474	ug/L	0.282	1	185	114839	0
[	Cu	65	17.088	ug/L	0.086	0	78	54268	1
[	Zn	66	43.600	ug/L	0.551	1	327	86676	1
[	Zn	67	38.750	ug/L	0.419	1	127	13377	3
[	Zn	68	40.479	ug/L	0.590	1	6722	67006	1
[	As	75	2.099	ug/L	0.027	1	237	4906	0
[	As-1	75	1.489	ug/L	0.096	6	7657	13646	0
[	Se	82	0.224	ug/L	0.027	11	-3	48	12
[	Se	78	-2.326	ug/L	0.281	12	7753	9309	0
[	Mo	98	2.422	ug/L	0.046	1	298	19979	3
	Y	89		ug/L			265659	379058	3
	Kr	83		ug/L			145	188	3
[>	In	115		ug/L			296249	419914	2
[	Ag	107	0.007	ug/L	0.000	3	18	116	4
[	Cd	111	0.316	ug/L	0.012	3	145	1319	0
[	Cd	114	0.292	ug/L	0.000	0	20	2403	2
[	Sb	121	0.275	ug/L	0.003	0	20	3433	3
[	Sb	123	0.276	ug/L	0.015	5	8	2600	3
[	Ba	135	20.966	ug/L	0.356	1	26	62141	2
[	Ba	137	20.735	ug/L	0.166	0	36	106552	1
[>	Tb	159		ug/L			387742	501709	2
[	Tl	205	0.009	ug/L	0.000	3	95	464	0
[	Pb	208	0.626	ug/L	0.003	0	612	30798	1
[	Bi	209		ug/L			325230	416289	2
[	Th	232	0.024	ug/L	0.003	13	429	2052	7
[	U	238	0.136	ug/L	0.003	1	543	10315	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 14:49:40
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	336166	2
[	Be	9	51.407	ug/L	0.759	1	5	22814	0
	C	13		mg/L			3530	4092	0
	Cl	37		mg/L			1867713	2847452	0
[>	Sc	45		ug/L			207316	296407	2
[	V	51	53.145	ug/L	1.400	2	1532	684070	1
[	V-1	51	52.876	ug/L	1.159	2	3341	698383	1
[	Cr	52	52.649	ug/L	1.688	3	4636	606797	1
[	Cr	53	51.864	ug/L	1.101	2	1102	73145	0
[	Mn	55	51.934	ug/L	0.899	1	366	982066	0
[	Co	59	53.187	ug/L	0.553	1	37	765779	1
[>	Ge	72		ug/L			272714	265892	1
[	Ni	60	55.218	ug/L	0.898	1	62	160759	0
[	Ni	62	56.575	ug/L	0.715	1	61	24640	1
[	Cu	63	55.045	ug/L	1.140	2	185	354687	1
[	Cu	65	54.018	ug/L	0.289	0	78	168221	1
[	Zn	66	54.352	ug/L	0.911	1	327	105986	0
[	Zn	67	54.661	ug/L	1.607	2	127	18451	2
[	Zn	68	51.999	ug/L	0.635	1	6722	81957	1
[	As	75	51.200	ug/L	0.661	1	237	110098	0
[	As-1	75	50.625	ug/L	0.548	1	7657	116645	0
[	Se	82	50.940	ug/L	0.712	1	-3	11706	0
[	Se	78	48.641	ug/L	0.221	0	7753	36759	0
[	Mo	98	51.267	ug/L	0.584	1	298	407065	0
	Y	89		ug/L			265659	354802	1
	Kr	83		ug/L			145	199	4
[>	In	115		ug/L			296249	395998	0
[	Ag	107	51.340	ug/L	1.085	2	18	660663	1
[	Cd	111	50.412	ug/L	0.784	1	145	167621	1
[	Cd	114	50.472	ug/L	0.575	1	20	387288	0
[	Sb	121	48.541	ug/L	0.336	0	20	566534	0
[	Sb	123	48.390	ug/L	0.746	1	8	428960	1
[	Ba	135	46.761	ug/L	0.126	0	26	130676	0
[	Ba	137	46.911	ug/L	0.527	1	36	227299	1
[>	Tb	159		ug/L			387742	464060	1
[	Tl	205	49.442	ug/L	0.675	1	95	1663301	0
[	Pb	208	51.897	ug/L	0.626	1	612	2301039	0
[	Bi	209		ug/L			325230	391565	0
[	Th	232	52.731	ug/L	1.466	2	429	3022534	1
[	U	238	51.793	ug/L	0.677	1	543	3381807	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 14:56:19
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			289574	325814	2
[	Be	9	-0.006	ug/L	0.003	56	5	4	34
	C	13		mg/L			3530	3882	1
	Cl	37		mg/L			1867713	2870160	0
[>	Sc	45		ug/L			207316	293976	0
|	V	51	-0.017	ug/L	0.012	71	1532	1962	7
|	V-1	51	0.035	ug/L	0.012	34	3341	5198	3
|	Cr	52	-0.025	ug/L	0.017	69	4636	6295	2
|	Cr	53	0.134	ug/L	0.047	35	1102	1746	3
|	Mn	55	0.003	ug/L	0.003	114	366	575	11
[	Co	59	0.001	ug/L	0.001	48	37	69	11
[>	Ge	72		ug/L			272714	360346	0
|	Ni	60	0.006	ug/L	0.004	65	62	100	11
|	Ni	62	1.187	ug/L	0.097	8	61	588	7
|	Cu	63	0.067	ug/L	0.008	11	185	669	7
|	Cu	65	0.006	ug/L	0.008	141	78	121	20
|	Zn	66	0.106	ug/L	0.000	0	327	635	0
|	Zn	67	0.205	ug/L	0.026	12	127	235	3
|	Zn	68	-0.855	ug/L	0.060	6	6722	7700	0
|	As	75	-0.025	ug/L	0.006	23	237	259	4
|	As-1	75	-0.535	ug/L	0.025	4	7657	9010	0
|	Se	82	-0.002	ug/L	0.029	1502	-3	-4	140
|	Se	78	2.010	ug/L	0.098	4	7753	9172	0
[	Mo	98	-0.041	ug/L	0.000	0	298	73	0
	Y	89		ug/L			265659	348921	0
	Kr	83		ug/L			145	183	3
[>	In	115		ug/L			296249	388999	1
|	Ag	107	0.006	ug/L	0.001	16	18	100	14
|	Cd	111	0.012	ug/L	0.010	82	145	229	13
|	Cd	114	-0.001	ug/L	0.001	42	20	18	21
|	Sb	121	0.017	ug/L	0.005	31	20	218	28
|	Sb	123	0.019	ug/L	0.004	21	8	173	22
|	Ba	135	0.003	ug/L	0.001	43	26	43	7
[	Ba	137	0.008	ug/L	0.001	8	36	87	2
[>	Tb	159		ug/L			387742	462951	0
|	Tl	205	0.004	ug/L	0.001	25	95	240	13
|	Pb	208	0.007	ug/L	0.001	10	612	1050	3
|	Bi	209		ug/L			325230	394692	1
|	Th	232	0.029	ug/L	0.005	18	429	2165	14
[	U	238	0.003	ug/L	0.000	9	543	824	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 15:02:52
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L				326877	2
[	Be	9		ug/L				5	50
	C	13		mg/L				3627	1
	Cl	37		mg/L				2842363	0
[>	Sc	45		ug/L				291358	1
[	V	51		ug/L				1840	3
[	V-1	51		ug/L				4859	2
[	Cr	52		ug/L				6350	1
[	Cr	53		ug/L				1683	3
[	Mn	55		ug/L				495	4
[	Co	59		ug/L				67	10
[>	Ge	72		ug/L				357527	2
[	Ni	60		ug/L				75	3
[	Ni	62		ug/L				539	5
[	Cu	63		ug/L				596	4
[	Cu	65		ug/L				88	14
[	Zn	66		ug/L				433	1
[	Zn	67		ug/L				207	7
[	Zn	68		ug/L				7598	1
[	As	75		ug/L				257	8
[	As-1	75		ug/L				9096	0
[	Se	82		ug/L				-17	12
[	Se	78		ug/L				9240	0
[	Mo	98		ug/L				28	36
	Y	89		ug/L				347954	2
	Kr	83		ug/L				188	6
[>	In	115		ug/L				388771	2
[	Ag	107		ug/L				48	17
[	Cd	111		ug/L				243	2
[	Cd	114		ug/L				12	16
[	Sb	121		ug/L				75	7
[	Sb	123		ug/L				62	8
[	Ba	135		ug/L				37	39
[	Ba	137		ug/L				59	14
[>	Tb	159		ug/L				464307	2
[	Tl	205		ug/L				187	3
[	Pb	208		ug/L				817	5
[	Bi	209		ug/L				395913	1
[	Th	232		ug/L				1144	3
[	U	238		ug/L				969	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 15:09:25
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	328368	2
[	Be	9	51.826	ug/L	0.443	0	5	22465	2
	C	13		mg/L			3627	3531	1
	Cl	37		mg/L			2842363	2791068	0
[>	Sc	45		ug/L			291358	287675	1
[	V	51	53.112	ug/L	1.054	1	1840	663286	1
[	V-1	51	52.897	ug/L	1.120	2	4859	678307	1
[	Cr	52	52.551	ug/L	0.784	1	6350	587917	1
[	Cr	53	51.936	ug/L	1.055	2	1683	71238	2
[	Mn	55	51.730	ug/L	1.026	1	495	949657	2
[	Co	59	52.486	ug/L	1.247	2	67	733535	3
[>	Ge	72		ug/L			357527	354265	2
[	Ni	60	55.005	ug/L	0.590	1	75	155058	2
[	Ni	62	54.224	ug/L	1.156	2	539	23330	3
[	Cu	63	54.607	ug/L	0.587	1	596	341110	2
[	Cu	65	53.697	ug/L	0.141	0	88	161901	2
[	Zn	66	54.209	ug/L	0.397	0	433	102373	2
[	Zn	67	54.090	ug/L	0.883	1	207	17727	3
[	Zn	68	52.724	ug/L	0.390	0	7598	79145	2
[	As	75	51.163	ug/L	0.230	0	257	106481	2
[	As-1	75	51.113	ug/L	0.144	0	9096	113004	2
[	Se	82	51.359	ug/L	0.083	0	-17	11414	1
[	Se	78	51.146	ug/L	1.223	2	9240	35985	2
[	Mo	98	51.408	ug/L	0.419	0	28	394929	2
	Y	89		ug/L			347954	346557	2
	Kr	83		ug/L			188	195	3
[>	In	115		ug/L			388771	382477	1
[	Ag	107	51.759	ug/L	0.620	1	48	643390	2
[	Cd	111	50.795	ug/L	0.278	0	243	163174	1
[	Cd	114	50.306	ug/L	0.639	1	12	372769	0
[	Sb	121	49.099	ug/L	0.339	0	75	553490	1
[	Sb	123	48.435	ug/L	0.595	1	62	414704	0
[	Ba	135	47.680	ug/L	0.135	0	37	128699	1
[	Ba	137	47.329	ug/L	0.374	0	59	221521	2
[>	Tb	159		ug/L			464307	461238	2
[	Tl	205	49.128	ug/L	0.816	1	187	1642737	2
[	Pb	208	51.415	ug/L	0.312	0	817	2266005	2
[	Bi	209		ug/L			395913	385096	2
[	Th	232	52.032	ug/L	0.156	0	1144	2965599	2
[	U	238	51.438	ug/L	0.485	0	969	3338120	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 15:16:03
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	324419	1
[	Be	9	0.001	ug/L	0.009	948	5	5	74
	C	13		mg/L			3627	3575	0
	Cl	37		mg/L			2842363	2749019	0
[>	Sc	45		ug/L			291358	281597	1
[	V	51	0.003	ug/L	0.019	696	1840	1812	13
[	V-1	51	-0.039	ug/L	0.010	25	4859	4207	4
[	Cr	52	-0.012	ug/L	0.001	8	6350	6012	1
[	Cr	53	-0.138	ug/L	0.027	19	1683	1445	2
[	Mn	55	0.003	ug/L	0.001	33	495	527	2
[	Co	59	0.000	ug/L	0.000	153	67	68	5
[>	Ge	72		ug/L			357527	346487	0
[	Ni	60	0.001	ug/L	0.004	533	75	75	16
[	Ni	62	-0.061	ug/L	0.025	41	539	497	2
[	Cu	63	-0.007	ug/L	0.001	19	596	535	1
[	Cu	65	0.000	ug/L	0.001	1594	88	86	4
[	Zn	66	-0.010	ug/L	0.007	63	433	401	3
[	Zn	67	0.014	ug/L	0.082	605	207	205	12
[	Zn	68	0.234	ug/L	0.044	18	7598	7674	0
[	As	75	0.017	ug/L	0.010	57	257	283	7
[	As-1	75	0.045	ug/L	0.031	69	9096	8905	0
[	Se	82	0.043	ug/L	0.037	86	-17	-7	101
[	Se	78	0.182	ug/L	0.152	83	9240	9048	0
[	Mo	98	0.007	ug/L	0.004	56	28	76	36
	Y	89		ug/L			347954	339587	1
	Kr	83		ug/L			188	187	1
[>	In	115		ug/L			388771	375840	0
[	Ag	107	0.004	ug/L	0.002	41	48	94	21
[	Cd	111	0.001	ug/L	0.003	397	243	237	4
[	Cd	114	0.001	ug/L	0.000	55	12	18	18
[	Sb	121	0.014	ug/L	0.005	34	75	228	23
[	Sb	123	0.015	ug/L	0.003	20	62	184	14
[	Ba	135	0.001	ug/L	0.004	261	37	39	24
[	Ba	137	0.001	ug/L	0.003	546	59	59	22
[>	Tb	159		ug/L			464307	457320	1
[	Tl	205	0.002	ug/L	0.000	17	187	265	5
[	Pb	208	0.003	ug/L	0.000	11	817	940	2
[	Bi	209		ug/L			395913	392814	1
[	Th	232	0.024	ug/L	0.005	19	1144	2470	11
[	U	238	0.006	ug/L	0.001	20	969	1365	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 MDUP RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 15:21:50
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

RR x10 Mn, Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	334406	1
[	Be	9	0.087	ug/L	0.020	22	5	43	20
	C	13		mg/L			3627	6173	0
	Cl	37		mg/L			2842363	2468014	1
[>	Sc	45		ug/L			291358	443817	2
[	V	51	4.110	ug/L	0.037	0	1840	81801	3
[	V-1	51	3.921	ug/L	0.018	0	4859	84437	3
[	Cr	52	0.945	ug/L	0.040	4	6350	25794	0
[	Cr	53	0.579	ug/L	0.088	15	1683	3757	2
[	Mn	55	349.882	ug/L	4.965	1	495	9902566	2
[	Co	59	3.627	ug/L	0.058	1	67	78288	3
[>	Ge	72		ug/L			357527	331541	1
[	Ni	60	19.193	ug/L	0.280	1	75	50680	1
[	Ni	62	16.860	ug/L	0.079	0	539	7132	2
[	Cu	63	25.916	ug/L	0.515	1	596	151808	3
[	Cu	65	26.351	ug/L	0.084	0	88	74396	1
[	Zn	66	1837.997	ug/L	19.217	1	433	3235021	1
[	Zn	67	1463.711	ug/L	4.863	0	207	443831	1
[	Zn	68	1745.370	ug/L	8.839	0	7598	2225646	2
[	As	75	31.290	ug/L	0.068	0	257	61032	1
[	As-1	75	31.772	ug/L	0.057	0	9096	68927	1
[	Se	82	1.352	ug/L	0.083	6	-17	265	6
[	Se	78	0.933	ug/L	0.096	10	9240	9027	2
[	Mo	98	0.927	ug/L	0.002	0	28	6688	1
	Y	89		ug/L			347954	450675	1
	Kr	83		ug/L			188	191	2
[>	In	115		ug/L			388771	360811	1
[	Ag	107	0.012	ug/L	0.001	6	48	186	4
[	Cd	111	8.462	ug/L	0.023	0	243	25833	1
[	Cd	114	8.343	ug/L	0.091	1	12	58335	1
[	Sb	121	0.160	ug/L	0.004	2	75	1772	3
[	Sb	123	0.153	ug/L	0.006	3	62	1296	4
[	Ba	135	113.790	ug/L	1.636	1	37	289652	0
[	Ba	137	114.152	ug/L	2.160	1	59	503864	2
[>	Tb	159		ug/L			464307	465929	1
[	Tl	205	0.062	ug/L	0.002	3	187	2290	4
[	Pb	208	2.370	ug/L	0.019	0	817	106301	1
[	Bi	209		ug/L			395913	377546	1
[	Th	232	0.122	ug/L	0.027	22	1144	8180	20
[	U	238	1.132	ug/L	0.010	0	969	75144	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 M RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 15:28:09
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

RR x10 Mn, Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	377927	5
[	Be	9	0.067	ug/L	0.014	20	5	39	21
	C	13		mg/L			3627	6299	2
	Cl	37		mg/L			2842363	2456790	1
[>	Sc	45		ug/L			291358	490204	5
|	V	51	3.989	ug/L	0.027	0	1840	87747	4
|	V-1	51	3.765	ug/L	0.034	0	4859	89861	4
|	Cr	52	0.925	ug/L	0.016	1	6350	28127	4
|	Cr	53	0.449	ug/L	0.041	9	1683	3854	3
|	Mn	55	345.312	ug/L	5.104	1	495	10793434	4
[	Co	59	3.541	ug/L	0.049	1	67	84416	4
[>	Ge	72		ug/L			357527	354601	3
|	Ni	60	19.774	ug/L	0.497	2	75	55871	5
|	Ni	62	17.214	ug/L	0.814	4	539	7776	5
|	Cu	63	25.574	ug/L	0.484	1	596	160219	4
|	Cu	65	26.267	ug/L	0.283	1	88	79316	3
|	Zn	66	1811.040	ug/L	40.812	2	433	3408824	3
|	Zn	67	1436.447	ug/L	22.924	1	207	465807	3
|	Zn	68	1717.040	ug/L	28.272	1	7598	2341784	3
|	As	75	31.056	ug/L	0.391	1	257	64789	3
|	As-1	75	31.220	ug/L	0.412	1	9096	72589	3
|	Se	82	1.301	ug/L	0.066	5	-17	272	5
|	Se	78	-0.434	ug/L	0.534	123	9240	8930	0
[	Mo	98	0.930	ug/L	0.007	0	28	7178	2
	Y	89		ug/L			347954	492693	4
	Kr	83		ug/L			188	184	2
[>	In	115		ug/L			388771	401606	3
|	Ag	107	0.010	ug/L	0.002	18	48	179	9
|	Cd	111	8.330	ug/L	0.238	2	243	28307	4
|	Cd	114	8.309	ug/L	0.082	0	12	64673	4
|	Sb	121	0.146	ug/L	0.004	2	75	1804	3
|	Sb	123	0.147	ug/L	0.004	2	62	1390	5
|	Ba	135	110.982	ug/L	2.522	2	37	314457	4
[	Ba	137	111.069	ug/L	0.569	0	59	545695	3
[>	Tb	159		ug/L			464307	513171	3
|	Tl	205	0.061	ug/L	0.002	3	187	2481	3
|	Pb	208	2.359	ug/L	0.025	1	817	116577	4
|	Bi	209		ug/L			395913	417897	4
|	Th	232	0.075	ug/L	0.000	0	1144	6037	3
[	U	238	1.135	ug/L	0.018	1	969	83017	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 MSPK RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 15:34:26
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

R/2 x10- Mn, Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	399041	4
[	Be	9	19.952	ug/L	0.381	1	5	10510	3
	C	13		mg/L			3627	6360	1
	Cl	37		mg/L			2842363	2339154	1
[>	Sc	45		ug/L			291358	487838	5
[	V	51	21.058	ug/L	0.372	1	1840	447621	4
[	V-1	51	20.761	ug/L	0.386	1	4859	456191	4
[	Cr	52	17.449	ug/L	0.774	4	6350	337731	3
[	Cr	53	16.785	ug/L	0.608	3	1683	40904	2
[	Mn	55	357.084	ug/L	12.723	3	495	11096426	2
[	Co	59	18.672	ug/L	0.561	3	67	442117	2
[>	Ge	72		ug/L			357527	353622	2
[	Ni	60	45.748	ug/L	0.233	0	75	128748	2
[	Ni	62	42.405	ug/L	0.401	0	539	18325	3
[	Cu	63	49.725	ug/L	0.234	0	596	310063	2
[	Cu	65	49.833	ug/L	0.229	0	88	149983	2
[	Zn	66	1699.175	ug/L	23.163	1	433	3189094	1
[	Zn	67	1350.655	ug/L	4.590	0	207	436827	2
[	Zn	68	1571.590	ug/L	68.342	4	7598	2139754	6
[	As	75	53.893	ug/L	0.177	0	257	111935	2
[	As-1	75	52.562	ug/L	0.323	0	9096	115730	2
[	Se	82	75.366	ug/L	0.505	0	-17	16727	2
[	Se	78	71.859	ug/L	0.849	1	9240	46764	1
[	Mo	98	0.828	ug/L	0.040	4	28	6381	6
	Y	89		ug/L			347954	500256	4
	Kr	83		ug/L			188	196	3
[>	In	115		ug/L			388771	406871	2
[	Ag	107	21.866	ug/L	0.490	2	48	289271	4
[	Cd	111	29.407	ug/L	0.162	0	243	100616	3
[	Cd	114	29.527	ug/L	0.286	0	12	232805	3
[	Sb	121	0.136	ug/L	0.003	2	75	1713	0
[	Sb	123	0.133	ug/L	0.009	6	62	1273	4
[	Ba	135	133.113	ug/L	1.748	1	37	382045	1
[	Ba	137	133.102	ug/L	3.764	2	59	662307	2
[>	Tb	159		ug/L			464307	528826	2
[	Tl	205	23.880	ug/L	0.041	0	187	915766	2
[	Pb	208	28.060	ug/L	0.303	1	817	1418602	3
[	Bi	209		ug/L			395913	424341	1
[	Th	232	24.039	ug/L	0.389	1	1144	1571682	2
[	U	238	24.515	ug/L	0.602	2	969	1825079	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 P RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 15:40:43
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	307308	2
[	Be	9	0.039	ug/L	0.004	9	5	20	9
	C	13		mg/L			3627	6486	1
	Cl	37		mg/L			2842363	2263643	0
[>	Sc	45		ug/L			291358	273233	4
	V	51	0.816	ug/L	0.047	5	1840	11364	2
	V-1	51	0.736	ug/L	0.046	6	4859	13446	1
	Cr	52	0.181	ug/L	0.026	14	6350	7851	1
	Cr	53	-0.019	ug/L	0.029	150	1683	1553	2
	Mn	55	14.204	ug/L	0.582	4	495	247678	0
[	Co	59	0.222	ug/L	0.010	4	67	3011	1
[>	Ge	72		ug/L			357527	292224	0
	Ni	60	1.343	ug/L	0.048	3	75	3182	3
	Ni	62	0.902	ug/L	0.053	5	539	753	1
	Cu	63	15.164	ug/L	0.162	1	596	78476	0
	Cu	65	15.427	ug/L	0.363	2	88	38413	1
	Zn	66	39.104	ug/L	0.728	1	433	61005	1
	Zn	67	34.898	ug/L	0.289	0	207	9492	1
	Zn	68	39.204	ug/L	0.254	0	7598	50130	0
	As	75	2.335	ug/L	0.041	1	257	4208	2
	As-1	75	2.631	ug/L	0.053	2	9096	11850	1
	Se	82	0.248	ug/L	0.017	6	-17	31	9
	Se	78	1.277	ug/L	0.105	8	9240	8105	0
[	Mo	98	2.749	ug/L	0.033	1	28	17437	0
	Y	89		ug/L			347954	293707	1
	Kr	83		ug/L			188	162	1
[>	In	115		ug/L			388771	321110	1
	Ag	107	0.004	ug/L	0.000	10	48	78	5
	Cd	111	0.265	ug/L	0.017	6	243	914	3
	Cd	114	0.276	ug/L	0.010	3	12	1730	4
	Sb	121	0.287	ug/L	0.007	2	75	2781	3
	Sb	123	0.296	ug/L	0.005	1	62	2178	1
	Ba	135	21.547	ug/L	0.251	1	37	48840	0
[	Ba	137	21.417	ug/L	0.103	0	59	84178	1
[>	Tb	159		ug/L			464307	419230	0
	Tl	205	0.008	ug/L	0.000	5	187	407	2
	Pb	208	0.134	ug/L	0.002	1	817	6088	1
	Bi	209		ug/L			395913	357494	0
	Th	232	0.007	ug/L	0.002	26	1144	1403	6
[	U	238	0.115	ug/L	0.004	3	969	7651	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 Q RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 15:47:00
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

RR x10 -Mn, Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	333654	20
[	Be	9	0.032	ug/L	0.019	59	5	18	33
	C	13		mg/L			3627	5953	7
	Cl	37		mg/L			2842363	2253596	11
[>	Sc	45		ug/L			291358	425608	29
[	V	51	1.065	ug/L	0.092	8	1840	21974	21
[	V-1	51	0.912	ug/L	0.131	14	4859	23797	18
[	Cr	52	0.134	ug/L	0.079	59	6350	11215	17
[	Cr	53	-0.268	ug/L	0.198	73	1683	1850	6
[	Mn	55	168.742	ug/L	12.688	7	495	4516560	21
[	Co	59	2.415	ug/L	0.198	8	67	49226	20
[>	Ge	72		ug/L			357527	312353	15
[	Ni	60	19.719	ug/L	1.736	8	75	49502	24
[	Ni	62	16.903	ug/L	0.429	2	539	6750	18
[	Cu	63	7.833	ug/L	0.066	0	596	43623	16
[	Cu	65	8.843	ug/L	0.225	2	88	23633	18
[	Zn	66	2120.731	ug/L	18.089	0	433	3515072	15
[	Zn	67	1690.766	ug/L	27.523	1	207	482167	13
[	Zn	68	1953.553	ug/L	83.850	4	7598	2351118	18
[	As	75	0.957	ug/L	0.004	0	257	1975	15
[	As-1	75	0.979	ug/L	0.570	58	9096	9598	4
[	Se	82	1.262	ug/L	0.165	13	-17	234	26
[	Se	78	1.415	ug/L	2.201	155	9240	8622	3
[	Mo	98	2.098	ug/L	0.068	3	28	14269	18
	Y	89		ug/L			347954	343596	17
	Kr	83		ug/L			188	169	6
[>	In	115		ug/L			388771	352966	18
[	Ag	107	0.005	ug/L	0.001	23	48	99	9
[	Cd	111	8.420	ug/L	0.186	2	243	25144	18
[	Cd	114	8.435	ug/L	0.180	2	12	57562	16
[	Sb	121	0.118	ug/L	0.004	3	75	1288	15
[	Sb	123	0.110	ug/L	0.008	6	62	918	14
[	Ba	135	79.532	ug/L	1.900	2	37	197605	16
[	Ba	137	79.698	ug/L	1.809	2	59	343214	16
[>	Tb	159		ug/L			464307	455484	17
[	Tl	205	0.044	ug/L	0.002	3	187	1653	17
[	Pb	208	u 0.017	ug/L	0.002	10	817	1542	12
[	Bi	209		ug/L			395913	372173	16
[	Th	232	0.004	ug/L	0.001	27	1144	1371	22
[	U	238	0.183	ug/L	0.004	2	969	12628	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 R RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 15:53:16
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	300625	1
[	Be	9	0.037	ug/L	0.006	15	5	19	9
	C	13		mg/L			3627	6431	1
	Cl	37		mg/L			2842363	2172664	7
[>	Sc	45		ug/L			291358	267406	3
[	V	51	0.774	ug/L	0.016	2	1840	10648	2
[	V-1	51	0.674	ug/L	0.005	0	4859	12432	3
[	Cr	52	0.188	ug/L	0.028	14	6350	7762	3
[	Cr	53	-0.078	ug/L	0.015	19	1683	1447	4
[	Mn	55	16.374	ug/L	0.263	1	495	279737	4
[	Co	59	0.253	ug/L	0.004	1	67	3353	4
[>	Ge	72		ug/L			357527	287242	2
[	Ni	60	1.481	ug/L	0.063	4	75	3446	6
[	Ni	62	0.748	ug/L	0.084	11	539	688	2
[	Cu	63	14.150	ug/L	0.212	1	596	72009	2
[	Cu	65	13.969	ug/L	0.084	0	88	34199	2
[	Zn	66	51.159	ug/L	0.413	0	433	78340	2
[	Zn	67	45.533	ug/L	1.191	2	207	12118	1
[	Zn	68	50.698	ug/L	0.562	1	7598	61923	1
[	As	75	2.206	ug/L	0.047	2	257	3918	0
[	As-1	75	2.613	ug/L	0.148	5	9096	11615	0
[	Se	82	0.279	ug/L	0.076	27	-17	35	36
[	Se	78	1.711	ug/L	0.463	27	9240	8147	0
[	Mo	98	2.730	ug/L	0.026	0	28	17018	1
	Y	89		ug/L			347954	288192	1
	Kr	83		ug/L			188	152	3
[>	In	115		ug/L			388771	319354	1
[	Ag	107	0.002	ug/L	0.000	9	48	59	4
[	Cd	111	0.313	ug/L	0.012	3	243	1037	3
[	Cd	114	0.324	ug/L	0.018	5	12	2012	5
[	Sb	121	0.290	ug/L	0.010	3	75	2789	4
[	Sb	123	0.289	ug/L	0.002	0	62	2114	1
[	Ba	135	22.191	ug/L	0.183	0	37	50030	1
[	Ba	137	21.788	ug/L	0.357	1	59	85177	2
[>	Tb	159		ug/L			464307	413441	2
[	Tl	205	0.008	ug/L	0.001	6	187	402	4
[	Pb	208	0.148	ug/L	0.003	1	817	6586	3
[	Bi	209		ug/L			395913	351200	1
[	Th	232	0.004	ug/L	0.001	17	1144	1234	2
[	U	238	0.113	ug/L	0.003	2	969	7425	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 S RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 15:59:32
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	304604	2
[	Be	9	0.005	ug/L	0.005	102	5	6	28
	C	13		mg/L			3627	6352	2
	Cl	37		mg/L			2842363	2291496	1
[>	Sc	45		ug/L			291358	275515	1
[	V	51	0.432	ug/L	0.009	2	1840	6895	0
[	V-1	51	0.323	ug/L	0.017	5	4859	8529	0
[	Cr	52	0.116	ug/L	0.004	3	6350	7239	2
[	Cr	53	-0.195	ug/L	0.025	12	1683	1340	1
[	Mn	55	15.445	ug/L	0.334	2	495	271858	2
[	Co	59	0.230	ug/L	0.001	0	67	3135	1
[>	Ge	72		ug/L			357527	293184	1
[	Ni	60	1.430	ug/L	0.058	4	75	3398	5
[	Ni	62	0.558	ug/L	0.011	2	539	636	1
[	Cu	63	16.453	ug/L	0.435	2	596	85381	2
[	Cu	65	16.340	ug/L	0.144	0	88	40825	2
[	Zn	66	46.591	ug/L	0.131	0	433	72864	1
[	Zn	67	40.971	ug/L	0.672	1	207	11149	0
[	Zn	68	45.738	ug/L	0.338	0	7598	57640	1
[	As	75	1.786	ug/L	0.032	1	257	3279	1
[	As-1	75	2.185	ug/L	0.083	3	9096	11136	0
[	Se	82	0.278	ug/L	0.050	17	-17	36	25
[	Se	78	1.706	ug/L	0.276	16	9240	8316	0
[	Mo	98	2.103	ug/L	0.026	1	28	13394	2
	Y	89		ug/L			347954	296969	2
	Kr	83		ug/L			188	155	3
[>	In	115		ug/L			388771	325365	2
[	Ag	107	0.002	ug/L	0.001	35	48	62	12
[	Cd	111	0.310	ug/L	0.011	3	243	1050	2
[	Cd	114	0.317	ug/L	0.016	5	12	2005	3
[	Sb	121	0.277	ug/L	0.004	1	75	2714	0
[	Sb	123	0.266	ug/L	0.003	1	62	1986	1
[	Ba	135	22.400	ug/L	0.652	2	37	51455	3
[	Ba	137	22.114	ug/L	0.544	2	59	88040	0
[>	Tb	159		ug/L			464307	422833	1
[	Tl	205	0.008	ug/L	0.001	9	187	413	3
[	Pb	208	0.116	ug/L	0.004	3	817	5430	2
[	Bi	209		ug/L			395913	358955	1
[	Th	232	0.001	ug/L	0.001	64	1144	1095	2
[	U	238	0.116	ug/L	0.002	1	969	7769	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 T RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 16:05:49
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

RR x10 Mn, Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	318205	2
[	Be	9	0.040	ug/L	0.006	15	5	21	12
	C	13		mg/L			3627	5826	2
	Cl	37		mg/L			2842363	2306353	1
[>	Sc	45		ug/L			291358	399277	4
|	V	51	1.183	ug/L	0.016	1	1840	22973	5
|	V-1	51	1.028	ug/L	0.014	1	4859	24812	3
|	Cr	52	0.224	ug/L	0.004	1	6350	12135	4
|	Cr	53	-0.184	ug/L	0.088	47	1683	1959	4
|	Mn	55	167.496	ug/L	1.508	0	495	4264908	4
[	Co	59	2.649	ug/L	0.053	1	67	51434	2
[>	Ge	72		ug/L			357527	306583	2
|	Ni	60	18.924	ug/L	0.800	4	75	46233	6
|	Ni	62	16.299	ug/L	0.312	1	539	6392	3
|	Cu	63	11.429	ug/L	0.177	1	596	62194	3
|	Cu	65	12.030	ug/L	0.349	2	88	31459	4
|	Zn	66	2154.537	ug/L	23.423	1	433	3506940	2
|	Zn	67	1706.210	ug/L	35.735	2	207	478522	4
|	Zn	68	2057.141	ug/L	25.371	1	7598	2424752	3
|	As	75	6.710	ug/L	0.116	1	257	12279	3
|	As-1	75	6.947	ug/L	0.066	0	9096	20034	2
|	Se	82	1.225	ug/L	0.008	0	-17	220	1
|	Se	78	1.741	ug/L	0.198	11	9240	8712	1
[	Mo	98	1.480	ug/L	0.031	2	28	9862	4
	Y	89		ug/L			347954	375370	3
	Kr	83		ug/L			188	167	3
[>	In	115		ug/L			388771	343727	5
|	Ag	107	0.005	ug/L	0.001	23	48	97	14
|	Cd	111	9.048	ug/L	0.246	2	243	26277	2
|	Cd	114	8.898	ug/L	0.108	1	12	59258	4
|	Sb	121	0.094	ug/L	0.002	2	75	1013	3
|	Sb	123	0.091	ug/L	0.004	4	62	754	4
|	Ba	135	72.342	ug/L	0.899	1	37	175390	3
[	Ba	137	73.196	ug/L	1.039	1	59	307691	3
[>	Tb	159		ug/L			464307	445924	2
|	Tl	205	0.041	ug/L	0.002	3	187	1520	1
|	Pb	208	0.265	ug/L	0.005	2	817	12087	3
|	Bi	209		ug/L			395913	363850	2
|	Th	232	0.004	ug/L	0.002	39	1144	1316	4
[	U	238	0.422	ug/L	0.006	1	969	27410	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 U RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 16:12:09
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	335634	1
[	Be	9	0.051	ug/L	0.017	33	5	27	28
	C	13		mg/L			3627	6635	1
	Cl	37		mg/L			2842363	2375486	0
[>	Sc	45		ug/L			291358	304212	2
|	V	51	0.678	ug/L	0.012	1	1840	10853	1
|	V-1	51	0.536	ug/L	0.017	3	4859	12295	1
|	Cr	52	0.173	ug/L	0.012	7	6350	8652	2
|	Cr	53	-0.224	ug/L	0.028	12	1683	1439	1
|	Mn	55	17.160	ug/L	0.209	1	495	333411	1
[	Co	59	0.248	ug/L	0.004	1	67	3730	0
[>	Ge	72		ug/L			357527	316100	1
|	Ni	60	1.597	ug/L	0.032	1	75	4082	1
|	Ni	62	0.376	ug/L	0.051	13	539	618	4
|	Cu	63	15.889	ug/L	0.192	1	596	88928	2
|	Cu	65	15.978	ug/L	0.141	0	88	43035	1
|	Zn	66	58.403	ug/L	0.264	0	433	98372	1
|	Zn	67	51.229	ug/L	0.281	0	207	14988	1
|	Zn	68	56.308	ug/L	0.640	1	7598	74951	1
|	As	75	2.003	ug/L	0.009	0	257	3937	1
|	As-1	75	2.123	ug/L	0.065	3	9096	11895	0
|	Se	82	0.255	ug/L	0.053	20	-17	35	31
|	Se	78	0.533	ug/L	0.243	45	9240	8418	0
[	Mo	98	2.949	ug/L	0.067	2	28	20234	2
	Y	89		ug/L			347954	324140	1
	Kr	83		ug/L			188	157	1
[>	In	115		ug/L			388771	360120	1
|	Ag	107	0.000	ug/L	0.001	161	48	50	16
|	Cd	111	0.339	ug/L	0.007	2	243	1249	1
|	Cd	114	0.349	ug/L	0.008	2	12	2448	1
|	Sb	121	0.280	ug/L	0.004	1	75	3037	1
|	Sb	123	0.276	ug/L	0.006	2	62	2286	2
|	Ba	135	22.516	ug/L	0.500	2	37	57229	1
[	Ba	137	22.497	ug/L	0.204	0	59	99167	1
[>	Tb	159		ug/L			464307	462523	0
|	Tl	205	0.007	ug/L	0.001	15	187	416	8
|	Pb	208	0.102	ug/L	0.001	0	817	5316	0
|	Bi	209		ug/L			395913	393334	1
|	Th	232	-0.002	ug/L	0.001	56	1144	1032	5
[	U	238	0.092	ug/L	0.001	1	969	6960	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 V RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 16:20:44
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	340753	0
[	Be	9	0.011	ug/L	0.008	78	5	10	37
	C	13		mg/L			3627	6471	2
	Cl	37		mg/L			2842363	2382910	0
[>	Sc	45		ug/L			291358	315496	3
|	V	51	0.675	ug/L	0.016	2	1840	11204	1
|	V-1	51	0.521	ug/L	0.014	2	4859	12529	1
|	Cr	52	0.086	ug/L	0.020	23	6350	7922	2
|	Cr	53	-0.343	ug/L	0.020	5	1683	1318	2
|	Mn	55	16.085	ug/L	0.402	2	495	324004	1
[	Co	59	0.224	ug/L	0.009	4	67	3502	2
[>	Ge	72		ug/L			357527	322769	0
|	Ni	60	1.667	ug/L	0.049	2	75	4348	3
|	Ni	62	0.403	ug/L	0.020	4	539	641	0
|	Cu	63	13.707	ug/L	0.207	1	596	78407	2
|	Cu	65	13.534	ug/L	0.206	1	88	37236	1
|	Zn	66	51.242	ug/L	0.973	1	433	88181	1
|	Zn	67	45.186	ug/L	0.431	0	207	13520	1
|	Zn	68	50.008	ug/L	0.645	1	7598	68742	1
|	As	75	1.957	ug/L	0.024	1	257	3933	1
|	As-1	75	2.118	ug/L	0.024	1	9096	12138	0
|	Se	82	0.301	ug/L	0.062	20	-17	45	27
|	Se	78	0.734	ug/L	0.154	20	9240	8693	0
[	Mo	98	2.900	ug/L	0.020	0	28	20317	0
	Y	89		ug/L			347954	334544	2
	Kr	83		ug/L			188	158	3
[>	In	115		ug/L			388771	362651	1
|	Ag	107	0.002	ug/L	0.000	13	48	74	3
|	Cd	111	0.329	ug/L	0.005	1	243	1228	2
|	Cd	114	0.335	ug/L	0.009	2	12	2365	0
|	Sb	121	0.273	ug/L	0.004	1	75	2983	3
|	Sb	123	0.274	ug/L	0.003	0	62	2283	2
|	Ba	135	22.495	ug/L	0.207	0	37	57590	2
[	Ba	137	22.317	ug/L	0.340	1	59	99065	2
[>	Tb	159		ug/L			464307	462481	2
|	Tl	205	0.008	ug/L	0.000	5	187	441	4
|	Pb	208	0.117	ug/L	0.001	0	817	5998	2
|	Bi	209		ug/L			395913	394618	0
|	Th	232	0.010	ug/L	0.000	1	1144	1717	2
[	U	238	0.095	ug/L	0.002	2	969	7152	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 16:27:03
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	315170	2
[	Be	9	49.313	ug/L	1.271	2	5	20513	0
	C	13		mg/L			3627	3521	2
	Cl	37		mg/L			2842363	2560090	1
[>	Sc	45		ug/L			291358	259945	0
[	V	51	50.929	ug/L	0.757	1	1840	574847	1
[	V-1	51	50.779	ug/L	0.576	1	4859	588614	0
[	Cr	52	51.049	ug/L	0.713	1	6350	516229	0
[	Cr	53	50.586	ug/L	0.795	1	1683	62736	0
[	Mn	55	50.691	ug/L	0.915	1	495	840765	1
[	Co	59	50.881	ug/L	0.996	1	67	642484	1
[>	Ge	72		ug/L			357527	322686	0
[	Ni	60	53.311	ug/L	0.741	1	75	136890	1
[	Ni	62	52.321	ug/L	0.537	1	539	20517	0
[	Cu	63	53.145	ug/L	1.111	2	596	302351	1
[	Cu	65	52.328	ug/L	0.844	1	88	143699	1
[	Zn	66	52.927	ug/L	0.842	1	433	91043	1
[	Zn	67	52.611	ug/L	0.334	0	207	15707	0
[	Zn	68	51.964	ug/L	0.633	1	7598	71141	0
[	As	75	50.422	ug/L	0.423	0	257	95585	1
[	As-1	75	50.565	ug/L	0.612	1	9096	101915	1
[	Se	82	52.049	ug/L	0.547	1	-17	10537	0
[	Se	78	52.636	ug/L	1.284	2	9240	33492	1
[	Mo	98	50.933	ug/L	0.112	0	28	356358	0
	Y	89		ug/L			347954	319131	0
	Kr	83		ug/L			188	166	6
[>	In	115		ug/L			388771	352282	0
[	Ag	107	50.301	ug/L	0.312	0	48	575899	1
[	Cd	111	50.614	ug/L	0.334	0	243	149768	1
[	Cd	114	50.144	ug/L	0.188	0	12	342291	1
[	Sb	121	49.042	ug/L	0.437	0	75	509213	0
[	Sb	123	48.755	ug/L	0.562	1	62	384510	0
[	Ba	135	48.394	ug/L	0.434	0	37	120309	1
[	Ba	137	48.313	ug/L	0.977	2	59	208244	1
[>	Tb	159		ug/L			464307	439061	1
[	Tl	205	50.212	ug/L	0.824	1	187	1598554	2
[	Pb	208	52.291	ug/L	0.505	0	817	2193878	1
[	Bi	209		ug/L			395913	372441	1
[	Th	232	52.840	ug/L	1.396	2	1144	2866586	2
[	U	238	52.875	ug/L	1.591	3	969	3266323	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 16:33:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	311886	1
[	Be	9	0.006	ug/L	0.009	157	5	7	50
	C	13		mg/L			3627	3368	1
	Cl	37		mg/L			2842363	2587977	0
[>	Sc	45		ug/L			291358	254427	2
|	V	51	0.022	ug/L	0.016	73	1840	1846	8
|	V-1	51	-0.090	ug/L	0.008	8	4859	3227	2
|	Cr	52	0.009	ug/L	0.010	106	6350	5636	1
|	Cr	53	-0.330	ug/L	0.015	4	1683	1078	3
|	Mn	55	-0.002	ug/L	0.003	123	495	397	10
[	Co	59	0.005	ug/L	0.001	25	67	117	12
[>	Ge	72		ug/L			357527	320490	0
|	Ni	60	0.005	ug/L	0.005	100	75	80	16
|	Ni	62	-0.846	ug/L	0.029	3	539	162	7
|	Cu	63	-0.050	ug/L	0.004	7	596	250	8
|	Cu	65	0.010	ug/L	0.003	31	88	107	7
|	Zn	66	0.070	ug/L	0.012	16	433	507	4
|	Zn	67	-0.120	ug/L	0.050	41	207	150	10
|	Zn	68	0.559	ug/L	0.048	8	7598	7497	0
|	As	75	0.025	ug/L	0.022	87	257	278	15
|	As-1	75	0.314	ug/L	0.053	16	9096	8731	0
|	Se	82	0.040	ug/L	0.059	146	-17	-7	150
|	Se	78	1.192	ug/L	0.223	18	9240	8848	0
[	Mo	98	0.002	ug/L	0.001	54	28	37	17
	Y	89		ug/L			347954	317214	1
	Kr	83		ug/L			188	175	0
[>	In	115		ug/L			388771	347435	0
|	Ag	107	-0.000	ug/L	0.000	161	48	40	11
|	Cd	111	0.002	ug/L	0.004	165	243	224	5
|	Cd	114	-0.000	ug/L	0.001	328	12	10	46
|	Sb	121	0.010	ug/L	0.004	34	75	173	21
|	Sb	123	0.009	ug/L	0.004	40	62	125	22
|	Ba	135	0.002	ug/L	0.005	209	37	39	32
[	Ba	137	0.004	ug/L	0.002	60	59	69	13
[>	Tb	159		ug/L			464307	431666	1
|	Tl	205	0.003	ug/L	0.000	8	187	261	2
|	Pb	208	0.007	ug/L	0.001	8	817	1039	3
|	Bi	209		ug/L			395913	371380	1
|	Th	232	0.010	ug/L	0.003	30	1144	1583	11
[	U	238	0.015	ug/L	0.001	8	969	1789	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 W RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 16:39:30
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

RR × 10 Mn, Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	324777	3
[	Be	9	0.038	ug/L	0.022	57	5	21	45
	C	13		mg/L			3627	5996	3
	Cl	37		mg/L			2842363	2416334	0
[>	Sc	45		ug/L			291358	438540	1
[	V	51	1.037	ug/L	0.019	1	1840	22466	3
[	V-1	51	0.861	ug/L	0.019	2	4859	24030	2
[	Cr	52	0.100	ug/L	0.010	10	6350	11242	2
[	Cr	53	-0.373	ug/L	0.021	5	1683	1770	1
[	Mn	55	175.650	ug/L	5.570	3	495	4912285	2
[	Co	59	2.746	ug/L	0.045	1	67	58599	1
[>	Ge	72		ug/L			357527	330473	1
[	Ni	60	20.862	ug/L	0.036	0	75	54904	1
[	Ni	62	17.684	ug/L	0.520	2	539	7430	1
[	Cu	63	9.493	ug/L	0.195	2	596	55762	1
[	Cu	65	10.395	ug/L	0.148	1	88	29300	0
[	Zn	66	2347.159	ug/L	19.615	0	433	4117478	0
[	Zn	67	1854.794	ug/L	10.228	0	207	560548	0
[	Zn	68	2209.115	ug/L	8.719	0	7598	2805992	1
[	As	75	1.077	ug/L	0.018	1	257	2323	0
[	As-1	75	0.948	ug/L	0.078	8	9096	10207	1
[	Se	82	1.259	ug/L	0.082	6	-17	245	5
[	Se	78	0.775	ug/L	0.317	40	9240	8920	1
[	Mo	98	1.704	ug/L	0.023	1	28	12237	1
	Y	89		ug/L			347954	366067	0
	Kr	83		ug/L			188	174	1
[>	In	115		ug/L			388771	362328	2
[	Ag	107	0.006	ug/L	0.001	22	48	120	11
[	Cd	111	9.784	ug/L	0.308	3	243	29945	1
[	Cd	114	9.700	ug/L	0.325	3	12	68079	2
[	Sb	121	0.097	ug/L	0.007	7	75	1101	5
[	Sb	123	0.096	ug/L	0.008	7	62	836	5
[	Ba	135	74.831	ug/L	2.662	3	37	191196	1
[	Ba	137	75.313	ug/L	3.037	4	59	333628	1
[>	Tb	159		ug/L			464307	466276	0
[	Tl	205	0.044	ug/L	0.001	2	187	1681	2
[	Pb	208	u0.075	ug/L	0.004	4	817	4147	3
[	Bi	209		ug/L			395913	379347	0
[	Th	232	0.046	ug/L	0.029	61	1144	3812	43
[	U	238	0.299	ug/L	0.006	1	969	20616	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 X RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 16:45:49
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	266284	2
[	Be	9	0.040	ug/L	0.010	26	5	17	17
	C	13		mg/L			3627	6050	2
	Cl	37		mg/L			2842363	1988312	0
[>	Sc	45		ug/L			291358	242651	1
[	V	51	0.968	ug/L	0.014	1	1840	11704	2
[	V-1	51	0.871	ug/L	0.004	0	4859	13402	1
[	Cr	52	0.227	ug/L	0.020	8	6350	7407	1
[	Cr	53	-0.019	ug/L	0.043	227	1683	1379	2
[	Mn	55	19.186	ug/L	0.180	0	495	297312	0
[	Co	59	0.285	ug/L	0.011	3	67	3418	2
[>	Ge	72		ug/L			357527	267725	0
[	Ni	60	1.516	ug/L	0.044	2	75	3285	2
[	Ni	62	0.178	ug/L	0.036	20	539	460	2
[	Cu	63	19.743	ug/L	0.169	0	596	93476	0
[	Cu	65	19.712	ug/L	0.387	1	88	44959	2
[	Zn	66	65.347	ug/L	0.697	1	433	93184	0
[	Zn	67	57.986	ug/L	0.474	0	207	14347	1
[	Zn	68	65.145	ug/L	0.036	0	7598	72555	0
[	As	75	2.737	ug/L	0.037	1	257	4487	1
[	As-1	75	3.539	ug/L	0.075	2	9096	12253	1
[	Se	82	0.244	ug/L	0.049	19	-17	27	28
[	Se	78	3.283	ug/L	0.205	6	9240	8220	1
[	Mo	98	2.588	ug/L	0.043	1	28	15045	1
	Y	89		ug/L			347954	270814	1
	Kr	83		ug/L			188	162	5
[>	In	115		ug/L			388771	295365	1
[	Ag	107	0.003	ug/L	0.000	11	48	64	5
[	Cd	111	0.393	ug/L	0.011	2	243	1158	2
[	Cd	114	0.396	ug/L	0.012	2	12	2274	3
[	Sb	121	0.291	ug/L	0.007	2	75	2591	3
[	Sb	123	0.277	ug/L	0.008	2	62	1878	2
[	Ba	135	22.895	ug/L	0.288	1	37	47737	2
[	Ba	137	23.070	ug/L	0.303	1	59	83392	0
[>	Tb	159		ug/L			464307	373820	1
[	Tl	205	0.010	ug/L	0.001	7	187	410	5
[	Pb	208	0.205	ug/L	0.002	1	817	7966	0
[	Bi	209		ug/L			395913	318759	1
[	Th	232	0.015	ug/L	0.001	9	1144	1611	2
[	U	238	0.166	ug/L	0.002	1	969	9499	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 16:52:08
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	243086	2
[	Be	9	0.139	ug/L	0.018	13	5	48	14
	C	13		mg/L			3627	8633	1
	Cl	37		mg/L			2842363	4943398	1
[>	Sc	45		ug/L			291358	296851	3
|	V	51	112.721	ug/L	4.006	3	1840	1449477	0
|	V-1	51	111.315	ug/L	3.892	3	4859	1466437	0
|	Cr	52	12.355	ug/L	0.537	4	6350	147435	0
|	Cr	53	14.744	ug/L	0.436	2	1683	22084	1
|	Mn	55	522.733	ug/L	22.589	4	495	9887223	1
[	Co	59	0.420	ug/L	0.011	2	67	6124	1
[>	Ge	72		ug/L			357527	267237	3
|	Ni	60	2.273	ug/L	0.105	4	75	4883	1
|	Ni	62	3.437	ug/L	0.032	0	539	1492	2
|	Cu	63	8.752	ug/L	0.183	2	596	41598	1
|	Cu	65	6.510	ug/L	0.273	4	88	14850	1
|	Zn	66	3.010	ug/L	0.103	3	433	4590	0
|	Zn	67	17.764	ug/L	0.384	2	207	4492	1
|	Zn	68	4.917	ug/L	0.311	6	7598	10709	0
|	As	75	1.667	ug/L	0.047	2	257	2802	0
|	As-1	75	2.375	ug/L	0.182	7	9096	10439	1
|	Se	82	1.029	ug/L	0.070	6	-17	159	4
|	Se	78	4.091	ug/L	0.586	14	9240	8521	1
[	Mo	98	1.055	ug/L	0.051	4	28	6129	1
	Y	89		ug/L			347954	427260	1
	Kr	83		ug/L			188	199	3
[>	In	115		ug/L			388771	276064	1
|	Ag	107	0.068	ug/L	0.003	3	48	642	3
|	Cd	111	-0.079	ug/L	0.149	188	243	-10	3316
|	Cd	114	0.017	ug/L	0.002	9	12	102	7
|	Sb	121	0.168	ug/L	0.007	4	75	1422	2
|	Sb	123	0.177	ug/L	0.007	3	62	1137	3
|	Ba	135	19.109	ug/L	0.377	1	37	37238	1
[	Ba	137	18.933	ug/L	0.484	2	59	63973	2
[>	Tb	159		ug/L			464307	361817	2
|	Tl	205	0.005	ug/L	0.001	30	187	272	13
|	Pb	208	1.744	ug/L	0.048	2	817	60894	0
|	Bi	209		ug/L			395913	289258	1
|	Th	232	0.328	ug/L	0.011	3	1144	15565	1
[	U	238	0.157	ug/L	0.002	1	969	8722	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 FDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 16:58:27
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	240248	3
[	Be	9	0.090	ug/L	0.014	15	5	32	11
	C	13		mg/L			3627	7884	4
	Cl	37		mg/L			2842363	4685848	2
[>	Sc	45		ug/L			291358	287368	3
[	V	51	85.968	ug/L	0.535	0	1840	1071372	3
[	V-1	51	85.168	ug/L	0.550	0	4859	1088047	3
[	Cr	52	7.837	ug/L	0.048	0	6350	92918	3
[	Cr	53	10.592	ug/L	0.088	0	1683	15832	2
[	Mn	55	486.213	ug/L	4.146	0	495	8911952	3
[	Co	59	0.314	ug/L	0.002	0	67	4456	3
[>	Ge	72		ug/L			357527	266236	2
[	Ni	60	1.611	ug/L	0.048	3	75	3468	5
[	Ni	62	1.628	ug/L	0.153	9	539	916	6
[	Cu	63	2.800	ug/L	0.051	1	596	13566	4
[	Cu	65	0.753	ug/L	0.046	6	88	1771	5
[	Zn	66	1.827	ug/L	0.043	2	433	2905	4
[	Zn	67	12.616	ug/L	0.538	4	207	3227	6
[	Zn	68	3.950	ug/L	0.068	1	7598	9688	2
[	As	75	0.792	ug/L	0.041	5	257	1425	2
[	As-1	75	1.561	ug/L	0.140	8	9096	9156	0
[	Se	82	0.989	ug/L	0.075	7	-17	152	7
[	Se	78	4.296	ug/L	0.454	10	9240	8571	1
[	Mo	98	0.476	ug/L	0.006	1	28	2767	4
	Y	89		ug/L			347954	352636	2
	Kr	83		ug/L			188	189	3
[>	In	115		ug/L			388771	274596	3
[	Ag	107	0.032	ug/L	0.003	9	48	323	11
[	Cd	111	-0.162	ug/L	0.082	50	243	-197	94
[	Cd	114	0.001	ug/L	0.002	110	12	16	48
[	Sb	121	0.061	ug/L	0.004	6	75	548	4
[	Sb	123	0.064	ug/L	0.002	3	62	439	4
[	Ba	135	13.128	ug/L	0.176	1	37	25455	2
[	Ba	137	13.148	ug/L	0.086	0	59	44202	2
[>	Tb	159		ug/L			464307	354639	2
[	Tl	205	0.002	ug/L	0.001	26	187	193	8
[	Pb	208	0.086	ug/L	0.003	3	817	3530	0
[	Bi	209		ug/L			395913	279777	1
[	Th	232	0.097	ug/L	0.003	3	1144	5139	4
[	U	238	0.066	ug/L	0.002	2	969	4027	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 17:04:44
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	267072	0
[	Be	9	0.086	ug/L	0.025	29	5	34	26
	C	13		mg/L			3627	7755	1
	Cl	37		mg/L			2842363	5018478	1
[>	Sc	45		ug/L			291358	323562	1
[	V	51	83.815	ug/L	1.364	1	1840	1176383	2
[	V-1	51	83.049	ug/L	1.331	1	4859	1194981	2
[	Cr	52	7.630	ug/L	0.143	1	6350	102047	2
[	Cr	53	10.359	ug/L	0.131	1	1683	17478	1
[	Mn	55	481.097	ug/L	9.355	1	495	9929064	2
[	Co	59	0.298	ug/L	0.003	1	67	4756	2
[>	Ge	72		ug/L			357527	287706	1
[	Ni	60	1.679	ug/L	0.051	3	75	3903	3
[	Ni	62	1.890	ug/L	0.030	1	539	1079	2
[	Cu	63	4.185	ug/L	0.020	0	596	21672	1
[	Cu	65	1.991	ug/L	0.025	1	88	4943	2
[	Zn	66	1.797	ug/L	0.095	5	433	3095	6
[	Zn	67	13.185	ug/L	0.495	3	207	3633	2
[	Zn	68	3.319	ug/L	0.062	1	7598	9774	1
[	As	75	0.816	ug/L	0.035	4	257	1582	4
[	As-1	75	1.233	ug/L	0.082	6	9096	9356	0
[	Se	82	1.059	ug/L	0.023	2	-17	177	2
[	Se	78	2.956	ug/L	0.295	9	9240	8694	0
[	Mo	98	0.475	ug/L	0.003	0	28	2983	1
	Y	89		ug/L			347954	383725	3
	Kr	83		ug/L			188	196	3
[>	In	115		ug/L			388771	298098	1
[	Ag	107	0.035	ug/L	0.004	11	48	374	11
[	Cd	111	-0.167	ug/L	0.042	25	243	-230	45
[	Cd	114	0.002	ug/L	0.002	72	12	21	39
[	Sb	121	0.062	ug/L	0.002	3	75	606	3
[	Sb	123	0.064	ug/L	0.001	1	62	476	2
[	Ba	135	13.147	ug/L	0.134	1	37	27677	2
[	Ba	137	13.147	ug/L	0.491	3	59	47984	3
[>	Tb	159		ug/L			464307	385153	2
[	Tl	205	0.002	ug/L	0.000	18	187	222	4
[	Pb	208	0.087	ug/L	0.002	2	817	3876	4
[	Bi	209		ug/L			395913	304298	1
[	Th	232	0.096	ug/L	0.003	2	1144	5511	4
[	U	238	0.065	ug/L	0.001	1	969	4307	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 FSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 17:11:01
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			326877	284354	3
	Be	9	24.654	ug/L	0.073	0	5	9258	3
	C	13		mg/L			3627	8612	3
	Cl	37		mg/L			2842363	5347329	2
>	Sc	45		ug/L			291358	352716	4
	V	51	102.955	ug/L	2.431	2	1840	1573441	2
	V-1	51	102.142	ug/L	2.254	2	4859	1599558	2
	Cr	52	25.582	ug/L	0.810	3	6350	354588	3
	Cr	53	28.247	ug/L	0.317	1	1683	48420	3
	Mn	55	502.772	ug/L	9.440	1	495	11304704	3
	Co	59	17.669	ug/L	0.272	1	67	302690	3
>	Ge	72		ug/L			357527	304352	2
	Ni	60	27.365	ug/L	0.248	0	75	66308	2
	Ni	62	27.774	ug/L	0.171	0	539	10487	2
	Cu	63	28.304	ug/L	0.134	0	596	152137	3
	Cu	65	25.643	ug/L	0.125	0	88	66461	2
	Zn	66	78.458	ug/L	0.259	0	433	127126	2
	Zn	67	84.557	ug/L	1.210	1	207	23709	4
	Zn	68	76.406	ug/L	0.777	1	7598	95635	3
	As	75	26.659	ug/L	0.251	0	257	47763	2
	As-1	75	25.836	ug/L	0.076	0	9096	52901	2
	Se	82	76.358	ug/L	0.760	0	-17	14585	1
	Se	78	77.288	ug/L	0.118	0	9240	42702	2
	Mo	98	25.850	ug/L	0.403	1	28	170614	3
	Y	89		ug/L			347954	411715	2
	Kr	83		ug/L			188	212	3
>	In	115		ug/L			388771	321892	2
	Ag	107	23.635	ug/L	0.247	1	48	247269	2
	Cd	111	23.486	ug/L	0.423	1	243	63617	3
	Cd	114	23.264	ug/L	0.158	0	12	145116	2
	Sb	121	23.520	ug/L	0.169	0	75	223182	2
	Sb	123	23.328	ug/L	0.151	0	62	168160	3
	Ba	135	36.920	ug/L	0.153	0	37	83871	2
	Ba	137	37.010	ug/L	0.235	0	59	145800	3
>	Tb	159		ug/L			464307	409667	1
	Tl	205	23.556	ug/L	0.154	0	187	699861	2
	Pb	208	24.695	ug/L	0.200	0	817	967140	1
	Bi	209		ug/L			395913	320371	1
	Th	232	23.913	ug/L	0.123	0	1144	1211177	1
	U	238	23.460	ug/L	0.043	0	969	1352922	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 G REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, November 27, 2012 17:17:17
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	285331	2
[	Be	9	0.059	ug/L	0.021	35	5	26	29
	C	13		mg/L			3627	5824	1
	Cl	37		mg/L			2842363	4085300	1
[>	Sc	45		ug/L			291358	285480	3
[	V	51	18.937	ug/L	0.141	0	1840	235844	2
[	V-1	51	19.405	ug/L	0.140	0	4859	249956	2
[	Cr	52	3.886	ug/L	0.044	1	6350	48893	2
[	Cr	53	6.310	ug/L	0.049	0	1683	10037	3
[	Mn	55	657.214	ug/L	13.188	2	495	11961289	1
[	Co	59	0.256	ug/L	0.010	3	67	3612	0
[>	Ge	72		ug/L			357527	308351	2
[	Ni	60	0.797	ug/L	0.031	3	75	2020	4
[	Ni	62	0.737	ug/L	0.046	6	539	734	1
[	Cu	63	1.463	ug/L	0.048	3	596	8458	5
[	Cu	65	0.242	ug/L	0.000	0	88	710	1
[	Zn	66	0.861	ug/L	0.013	1	433	1783	2
[	Zn	67	3.583	ug/L	0.119	3	207	1188	4
[	Zn	68	1.749	ug/L	0.165	9	7598	8617	0
[	As	75	0.630	ug/L	0.040	6	257	1360	6
[	As-1	75	0.591	ug/L	0.084	14	9096	8891	0
[	Se	82	1.235	ug/L	0.054	4	-17	224	5
[	Se	78	1.259	ug/L	0.423	33	9240	8541	0
[	Mo	98	0.145	ug/L	0.009	6	28	992	6
	Y	89		ug/L			347954	337593	1
	Kr	83		ug/L			188	185	4
[>	In	115		ug/L			388771	321840	2
[	Ag	107	0.019	ug/L	0.002	8	48	243	6
[	Cd	111	-0.067	ug/L	0.019	28	243	20	246
[	Cd	114	0.006	ug/L	0.001	11	12	48	10
[	Sb	121	0.038	ug/L	0.001	3	75	424	4
[	Sb	123	0.038	ug/L	0.003	7	62	328	4
[	Ba	135	13.001	ug/L	0.124	0	37	29547	1
[	Ba	137	13.175	ug/L	0.161	1	59	51912	1
[>	Tb	159		ug/L			464307	408186	1
[	Tl	205	0.044	ug/L	0.010	22	187	1453	19
[	Pb	208	0.029	ug/L	0.002	6	817	1845	3
[	Bi	209		ug/L			395913	332308	1
[	Th	232	0.039	ug/L	0.004	11	1144	2964	6
[	U	238	0.032	ug/L	0.002	6	969	2714	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 H REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, November 27, 2012 17:23:33
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

RR Ni

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	304651	0
[	Be	9	<0.009	ug/L	0.009	96	5	8	43
	C	13		mg/L			3627	5064	2
	Cl	37		mg/L			2842363	2564513	0
[>	Sc	45		ug/L			291358	290751	1
[	V	51	3.045	ug/L	0.034	1	1840	40166	1
[	V-1	51	3.145	ug/L	0.030	0	4859	45318	1
[	Cr	52	0.595	ug/L	0.025	4	6350	12994	0
[	Cr	53	1.061	ug/L	0.014	1	1683	3115	1
[	Mn	55	1456.734	ug/L	26.994	1	495	27007258	0
[	Co	59	0.557	ug/L	0.003	0	67	7937	2
[>	Ge	72		ug/L			357527	314287	2
[	Ni	60	2.648	ug/L	0.046	1	75	6684	0
[	Ni	62	1.920	ug/L	0.197	10	539	1189	4
[	Cu	63	0.555	ug/L	0.007	1	596	3595	1
[	Cu	65	<0.175	ug/L	0.015	8	88	544	6
[	Zn	66	0.955	ug/L	0.015	1	433	1974	2
[	Zn	67	1.753	ug/L	0.058	3	207	685	4
[	Zn	68	1.728	ug/L	0.097	5	7598	8761	2
[	As	75	2.885	ug/L	0.005	0	257	5539	1
[	As-1	75	2.558	ug/L	0.118	4	9096	12610	0
[	Se	82	1.901	ug/L	0.074	3	-17	359	5
[	Se	78	0.529	ug/L	0.391	73	9240	8366	0
[	Mo	98	0.120	ug/L	0.007	5	28	845	7
	Y	89		ug/L			347954	319508	1
	Kr	83		ug/L			188	160	0
[>	In	115		ug/L			388771	331159	0
[	Ag	107	0.002	ug/L	0.000	13	48	67	4
[	Cd	111	-0.013	ug/L	0.007	52	243	170	10
[	Cd	114	0.000	ug/L	0.001	193	12	12	27
[	Sb	121	0.061	ug/L	0.001	0	75	656	1
[	Sb	123	0.058	ug/L	0.002	3	62	486	2
[	Ba	135	17.605	ug/L	0.065	0	37	41162	0
[	Ba	137	17.523	ug/L	0.342	1	59	71038	2
[>	Tb	159		ug/L			464307	425151	2
[	Tl	205	0.013	ug/L	0.001	9	187	561	8
[	Pb	208	0.214	ug/L	0.003	1	817	9424	1
[	Bi	209		ug/L			395913	352516	2
[	Th	232	0.002	ug/L	0.001	72	1144	1143	6
[	U	238	0.014	ug/L	0.001	8	969	1724	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 I REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 17:29:49
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	292801	2
[	Be	9	0.024	ug/L	0.024	98	5	13	63
	C	13		mg/L			3627	8348	2
	Cl	37		mg/L			2842363	25638472	2
[>	Sc	45		ug/L			291358	370534	4
|	V	51	10.519	ug/L	0.249	2	1840	171042	3
|	V-1	51	16.775	ug/L	0.441	2	4859	281293	4
|	Cr	52	2.368	ug/L	0.040	1	6350	41814	3
|	Cr	53	21.925	ug/L	0.750	3	1683	39982	6
|	Mn	55	343.661	ug/L	5.097	1	495	8118551	3
[	Co	59	0.238	ug/L	0.004	1	67	4364	3
[>	Ge	72		ug/L			357527	290667	1
|	Ni	60	4.700	ug/L	0.113	2	75	10928	3
|	Ni	62	11.921	ug/L	0.992	8	539	4549	7
|	Cu	63	13.338	ug/L	0.311	2	596	68717	2
|	Cu	65	0.808	ug/L	0.026	3	88	2070	4
|	Zn	66	1.541	ug/L	0.017	1	433	2730	1
|	Zn	67	7.566	ug/L	0.396	5	207	2177	3
|	Zn	68	3.603	ug/L	0.132	3	7598	10191	1
|	As	75	4.018	ug/L	0.095	2	257	7052	2
|	As-1	75	0.476	ug/L	0.131	27	9096	8188	1
|	Se	82	13.510	ug/L	0.446	3	-17	2453	4
|	Se	78	1.924	ug/L	0.253	13	9240	8339	0
[	Mo	98	0.180	ug/L	0.009	5	28	1159	5
	Y	89		ug/L			347954	352481	2
	Kr	83		ug/L			188	385	7
[>	In	115		ug/L			388771	307143	3
|	Ag	107	0.016	ug/L	0.000	2	48	194	1
|	Cd	111	-1.589	ug/L	0.240	15	243	-3887	12
|	Cd	114	0.002	ug/L	0.002	137	12	19	65
|	Sb	121	0.221	ug/L	0.008	3	75	2060	2
|	Sb	123	0.228	ug/L	0.003	1	62	1614	3
|	Ba	135	52.622	ug/L	0.763	1	37	114023	1
[	Ba	137	51.952	ug/L	0.458	0	59	195210	2
[>	Tb	159		ug/L			464307	384945	1
|	Tl	205	0.006	ug/L	0.001	15	187	314	9
|	Pb	208	0.032	ug/L	0.001	3	817	1869	3
|	Bi	209		ug/L			395913	287479	1
|	Th	232	0.010	ug/L	0.001	6	1144	1403	1
[	U	238	0.069	ug/L	0.002	2	969	4533	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, November 27, 2012 17:36:05
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

RR Cr (x5)

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	317206	5
[	Be	9	0.078	ug/L	0.013	16	5	37	12
	C	13		mg/L			3627	8186	3
	Cl	37		mg/L			2842363	5704451	2
[>	Sc	45		ug/L			291358	399512	7
[	V	51	82.610	ug/L	2.351	2	1840	1429629	5
[	V-1	51	82.359	ug/L	2.454	2	4859	1461114	4
[	Cr	52	7.001	ug/L	0.161	2	6350	116224	6
[	Cr	53	11.259	ug/L	0.577	5	1683	23201	3
[	Mn	55	455.595	ug/L	17.273	3	495	11588754	4
[	Co	59	0.277	ug/L	0.012	4	67	5453	5
[>	Ge	72		ug/L			357527	318768	3
[	Ni	60	1.825	ug/L	0.040	2	75	4692	3
[	Ni	62	5.066	ug/L	0.212	4	539	2396	4
[	Cu	63	3.754	ug/L	0.060	1	596	21598	4
[	Cu	65	0.696	ug/L	0.035	4	88	1968	7
[	Zn	66	1.691	ug/L	0.013	0	433	3249	4
[	Zn	67	17.045	ug/L	0.381	2	207	5154	5
[	Zn	68	2.660	ug/L	0.157	5	7598	10021	1
[	As	75	0.788	ug/L	0.034	4	257	1701	3
[	As-1	75	0.692	ug/L	0.164	23	9096	9369	0
[	Se	82	0.953	ug/L	0.102	10	-17	175	14
[	Se	78	0.861	ug/L	0.539	62	9240	8639	0
[	Mo	98	0.466	ug/L	0.005	1	28	3245	4
	Y	89		ug/L			347954	439225	5
	Kr	83		ug/L			188	217	4
[>	In	115		ug/L			388771	333697	4
[	Ag	107	0.038	ug/L	0.004	9	48	451	13
[	Cd	111	-0.037	ug/L	0.061	164	243	99	168
[	Cd	114	0.002	ug/L	0.002	108	12	23	60
[	Sb	121	0.063	ug/L	0.002	2	75	689	7
[	Sb	123	0.066	ug/L	0.002	2	62	547	6
[	Ba	135	13.403	ug/L	0.150	1	37	31575	3
[	Ba	137	13.455	ug/L	0.144	1	59	54962	4
[>	Tb	159		ug/L			464307	433308	3
[	Tl	205	0.003	ug/L	0.001	34	187	276	9
[	Pb	208	0.121	ug/L	0.001	1	817	5761	3
[	Bi	209		ug/L			395913	345552	4
[	Th	232	0.101	ug/L	0.001	1	1144	6453	4
[	U	238	0.064	ug/L	0.002	2	969	4806	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 17:42:26
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	308093	1
[	Be	9	51.604	ug/L	0.754	1	5	20993	2
	C	13		mg/L			3627	3538	0
	Cl	37		mg/L			2842363	2579912	1
[>	Sc	45		ug/L			291358	251258	1
[	V	51	51.512	ug/L	0.442	0	1840	561979	1
[	V-1	51	52.004	ug/L	0.558	1	4859	582609	2
[	Cr	52	51.555	ug/L	0.606	1	6350	503864	1
[	Cr	53	53.047	ug/L	0.894	1	1683	63533	3
[	Mn	55	50.185	ug/L	0.346	0	495	804662	1
[	Co	59	51.186	ug/L	0.616	1	67	624853	2
[>	Ge	72		ug/L			357527	310783	1
[	Ni	60	52.410	ug/L	0.817	1	75	129629	2
[	Ni	62	53.331	ug/L	0.674	1	539	20132	1
[	Cu	63	53.212	ug/L	0.142	0	596	291583	1
[	Cu	65	52.574	ug/L	0.812	1	88	139073	2
[	Zn	66	53.062	ug/L	0.251	0	433	87913	1
[	Zn	67	54.316	ug/L	0.997	1	207	15612	2
[	Zn	68	52.510	ug/L	0.450	0	7598	69168	1
[	As	75	50.803	ug/L	0.324	0	257	92758	2
[	As-1	75	50.960	ug/L	0.338	0	9096	98865	2
[	Se	82	51.131	ug/L	0.270	0	-17	9969	1
[	Se	78	51.772	ug/L	0.228	0	9240	31860	1
[	Mo	98	50.906	ug/L	0.577	1	28	343067	2
	Y	89		ug/L			347954	303475	2
	Kr	83		ug/L			188	179	2
[>	In	115		ug/L			388771	334194	1
[	Ag	107	50.440	ug/L	1.252	2	48	547645	0
[	Cd	111	50.987	ug/L	0.542	1	243	143116	2
[	Cd	114	50.063	ug/L	0.342	0	12	324183	2
[	Sb	121	49.494	ug/L	0.629	1	75	487469	1
[	Sb	123	49.434	ug/L	0.596	1	62	369859	2
[	Ba	135	48.394	ug/L	0.751	1	37	114139	2
[	Ba	137	48.357	ug/L	0.486	1	59	197737	1
[>	Tb	159		ug/L			464307	417798	0
[	Tl	205	49.854	ug/L	0.300	0	187	1510318	1
[	Pb	208	52.456	ug/L	0.253	0	817	2094355	1
[	Bi	209		ug/L			395913	355562	2
[	Th	232	53.242	ug/L	0.858	1	1144	2749161	2
[	U	238	53.196	ug/L	0.373	0	969	3127463	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 17:49:04
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	325806	1
[	Be	9	0.001	ug/L	0.007	708	5	5	58
	C	13		mg/L			3627	3634	1
	Cl	37		mg/L			2842363	2682448	1
[>	Sc	45		ug/L			291358	264433	1
[	V	51	-0.001	ug/L	0.005	358	1840	1652	2
[	V-1	51	0.512	ug/L	0.046	8	4859	10401	4
[	Cr	52	-0.009	ug/L	0.018	209	6350	5675	3
[	Cr	53	1.553	ug/L	0.111	7	1683	3439	2
[	Mn	55	0.015	ug/L	0.003	20	495	696	6
[	Co	59	0.005	ug/L	0.001	20	67	119	8
[>	Ge	72		ug/L			357527	329135	1
[	Ni	60	0.008	ug/L	0.005	60	75	89	12
[	Ni	62	0.080	ug/L	0.052	65	539	527	2
[	Cu	63	0.238	ug/L	0.012	5	596	1928	2
[	Cu	65	0.017	ug/L	0.006	32	88	129	11
[	Zn	66	0.090	ug/L	0.018	19	433	555	5
[	Zn	67	0.597	ug/L	0.078	12	207	370	6
[	Zn	68	0.283	ug/L	0.112	39	7598	7350	0
[	As	75	0.028	ug/L	0.019	67	257	290	11
[	As-1	75	0.082	ug/L	0.096	116	9096	8528	0
[	Se	82	0.088	ug/L	0.014	15	-17	2	141
[	Se	78	0.314	ug/L	0.329	104	9240	8658	0
[	Mo	98	0.006	ug/L	0.002	33	28	71	20
	Y	89		ug/L			347954	321300	0
	Kr	83		ug/L			188	175	2
[>	In	115		ug/L			388771	354172	1
[	Ag	107	0.006	ug/L	0.002	29	48	109	16
[	Cd	111	-0.002	ug/L	0.005	251	243	216	5
[	Cd	114	0.001	ug/L	0.000	66	12	16	17
[	Sb	121	0.012	ug/L	0.005	40	75	198	25
[	Sb	123	0.010	ug/L	0.004	39	62	139	22
[	Ba	135	0.004	ug/L	0.002	39	37	44	9
[	Ba	137	0.004	ug/L	0.002	44	59	72	11
[>	Tb	159		ug/L			464307	439762	1
[	Tl	205	0.007	ug/L	0.001	16	187	388	7
[	Pb	208	0.009	ug/L	0.001	8	817	1158	3
[	Bi	209		ug/L			395913	382497	2
[	Th	232	0.025	ug/L	0.006	25	1144	2451	12
[	U	238	0.011	ug/L	0.000	3	969	1571	1

11-28-12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS44 MB REN
Sample Dil Factor: 2 RL 11-28-12
Comments:
Sample Date/Time: Tuesday, November 27, 2012 17:54:52
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			326877	374896 ✓	1
[	**Be**	**9**	**-0.005**	ug/L	0.002	31	5	3	21
	C	**13**		mg/L			3627	5100	0
	Cl	**37**		mg/L			2842363	2803696	1
[>	**Sc**	**45**		ug/L			291358	302797 ✓	1
[	**V**	**51**	**0.013**	ug/L	0.008	64	1840	2081	6
[	**V-1**	**51**	**0.275**	ug/L	0.016	5	4859	8741	1
[	**Cr**	**52**	**0.001**	ug/L	0.008	846	6350	6611	2
[	**Cr**	**53**	**0.800**	ug/L	0.054	6	1683	2876	1
[	**Mn**	**55**	**0.237**	ug/L	0.001	0	495	5088	1
[	**Co**	**59**	**-0.002**	ug/L	0.001	42	67	42	28
[>	**Ge**	**72**		ug/L			357527	364227 ✓	2
[	**Ni**	**60**	**-0.003**	ug/L	0.002	76	75	67	9
[	**Ni**	**62**	**-0.106**	ug/L	0.035	32	539	504	4
[	**Cu**	**63**	**U 0.291**	ug/L	0.009	3	596	2472	0
[	**Cu**	**65**	**0.103**	ug/L	0.002	1	88	410	3
[	**Zn**	**66**	**U 0.809**	ug/L	0.042	5	433	2005	4
[	**Zn**	**67**	**1.074**	ug/L	0.134	12	207	568	8
[	**Zn**	**68**	**0.389**	ug/L	0.246	63	7598	8278	2
[	**As**	**75**	**U 0.002**	ug/L	0.013	605	257	266	11
[	**As-1**	**75**	**-0.296**	ug/L	0.074	25	9096	8646	0
[	**Se**	**82**	**0.152**	ug/L	0.055	36	-17	16	76
[	**Se**	**78**	**-1.130**	ug/L	0.293	25	9240	8801	0
[	**Mo**	**98**	**0.004**	ug/L	0.001	19	28	64	11
	Y	**89**		ug/L			347954	358214	0
	Kr	**83**		ug/L			188	161	1
[>	**In**	**115**		ug/L			388771	393017 ✓	1
[	**Ag**	**107**	**0.002**	ug/L	0.001	53	48	78	18
[	**Cd**	**111**	**0.009**	ug/L	0.002	20	243	276	3
[	**Cd**	**114**	**-0.000**	ug/L	0.000	205	12	11	26
[	**Sb**	**121**	**0.002**	ug/L	0.002	82	75	97	16
[	**Sb**	**123**	**0.002**	ug/L	0.003	134	62	80	28
[	**Ba**	**135**	**0.009**	ug/L	0.003	31	37	61	13
[	**Ba**	**137**	**0.005**	ug/L	0.001	26	59	85	8
[>	**Tb**	**159**		ug/L			464307	491158 ✓	2
[	**Tl**	**205**	**0.004**	ug/L	0.000	3	187	344	1
[	**Pb**	**208**	**U 0.009**	ug/L	0.001	12	817	1290	5
[	**Bi**	**209**		ug/L			395913	429445	1
[	**Th**	**232**	**0.017**	ug/L	0.003	16	1144	2232	6
[	**U**	**238**	**0.012**	ug/L	0.003	25	969	1847	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 MB1 REN
Sample Dil Factor: 2
Comments: LC 11-28-12
Sample Date/Time: Tuesday, November 27, 2012 18:01:12
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			326877	370458	3
[	**Be**	**9**	U 0.011	ug/L	0.006	58	5	10	26
	C	**13**		mg/L			3627	5553	3
	Cl	**37**		mg/L			2842363	2793211	1
[>	**Sc**	**45**		ug/L			291358	304264	2
[	**V**	**51**	**-0.008**	ug/L	0.005	66	1840	1813	3
[	**V-1**	**51**	**0.205**	ug/L	0.025	12	4859	7828	2
[	**Cr**	**52**	U **0.003**	ug/L	0.015	472	6350	6666	1
[	**Cr**	**53**	**0.650**	ug/L	0.082	12	1683	2676	2
[	**Mn**	**55**	U **0.101**	ug/L	0.005	4	495	2486	4
[	**Co**	**59**	**0.003**	ug/L	0.001	32	67	110	11
[>	**Ge**	**72**		ug/L			357527	363756	2
[	**Ni**	**60**	U **-0.002**	ug/L	0.003	218	75	72	13
[	**Ni**	**62**	**-0.132**	ug/L	0.036	27	539	492	4
[	**Cu**	**63**	**0.710**	ug/L	0.005	0	596	5152	2
[	**Cu**	**65**	**0.515**	ug/L	0.016	3	88	1684	3
[	**Zn**	**66**	U **0.225**	ug/L	0.016	6	433	875	5
[	**Zn**	**67**	**0.523**	ug/L	0.075	14	207	384	4
[	**Zn**	**68**	**-0.101**	ug/L	0.184	180	7598	7584	1
[	**As**	**75**	U **0.000**	ug/L	0.008	1856	257	262	8
[	**As-1**	**75**	**-0.247**	ug/L	0.174	70	9096	8733	1
[	**Se**	**82**	U **0.089**	ug/L	0.054	60	-17	2	549
[	**Se**	**78**	**-0.931**	ug/L	0.716	76	9240	8892	1
[	**Mo**	**98**	**0.006**	ug/L	0.001	13	28	74	10
	Y	**89**		ug/L			347954	361685	3
	Kr	**83**		ug/L			188	175	5
[>	**In**	**115**		ug/L			388771	396441	1
[	**Ag**	**107**	U **0.004**	ug/L	0.001	18	48	102	8
[	**Cd**	**111**	U **0.010**	ug/L	0.011	107	243	280	12
[	**Cd**	**114**	**0.005**	ug/L	0.001	21	12	54	16
[	**Sb**	**121**	U **0.004**	ug/L	0.001	29	75	129	11
[	**Sb**	**123**	**0.003**	ug/L	0.001	47	62	89	14
[	**Ba**	**135**	U **0.253**	ug/L	0.016	6	37	745	7
[	**Ba**	**137**	**0.254**	ug/L	0.008	3	59	1291	2
[>	**Tb**	**159**		ug/L			464307	490530	2
[	**Tl**	**205**	U **0.009**	ug/L	0.000	2	187	515	3
[	**Pb**	**208**	U **0.021**	ug/L	0.001	4	817	1869	3
[	**Bi**	**209**		ug/L			395913	423337	2
[	**Th**	**232**	**0.020**	ug/L	0.002	8	1144	2415	4
[	**U**	**238**	**0.057**	ug/L	0.005	8	969	4961	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 MB2 REN
Sample Dil Factor: 2
Comments: EL 11.28.12
Sample Date/Time: Tuesday, November 27, 2012 18:07:31
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	371705	0
[	Be	9	u 0.007	ug/L	0.005	75	5	9	28
	C	13		mg/L			3627	5661	1
	Cl	37		mg/L			2842363	2798125	0
[>	Sc	45		ug/L			291358	300874	0
[	V	51	-0.007	ug/L	0.006	80	1840	1803	4
[	V-1	51	0.173	ug/L	0.020	11	4859	7322	3
[	Cr	52	u 0.031	ug/L	0.004	12	6350	6918	0
[	Cr	53	0.577	ug/L	0.076	13	1683	2546	3
[	Mn	55	0.520	ug/L	0.009	1	495	10496	1
[	Co	59	0.001	ug/L	0.001	51	67	89	11
[>	Ge	72		ug/L			357527	362154	0
[	Ni	60	u 0.050	ug/L	0.005	8	75	221	5
[	Ni	62	-0.104	ug/L	0.030	28	539	501	1
[	Cu	63	u 0.322	ug/L	0.013	3	596	2654	2
[	Cu	65	0.142	ug/L	0.003	2	88	528	1
[	Zn	66	u 3.194	ug/L	0.044	1	433	6579	1
[	Zn	67	3.157	ug/L	0.056	1	207	1255	1
[	Zn	68	2.766	ug/L	0.014	0	7598	11536	1
[	As	75	u -0.008	ug/L	0.011	130	257	242	9
[	As-1	75	-0.270	ug/L	0.062	22	9096	8652	0
[	Se	82	u 0.140	ug/L	0.018	12	-17	13	29
[	Se	78	-1.021	ug/L	0.219	21	9240	8811	0
[	Mo	98	0.001	ug/L	0.001	63	28	39	16
	Y	89		ug/L			347954	358538	1
	Kr	83		ug/L			188	155	4
[>	In	115		ug/L			388771	395119	0
[	Ag	107	u -0.000	ug/L	0.000	1330	48	49	11
[	Cd	111	u 0.013	ug/L	0.004	30	243	289	5
[	Cd	114	0.002	ug/L	0.001	38	12	26	18
[	Sb	121	u -0.000	ug/L	0.000	101	75	74	4
[	Sb	123	-0.001	ug/L	0.001	114	62	52	24
[	Ba	135	u 0.088	ug/L	0.010	11	37	282	10
[	Ba	137	0.088	ug/L	0.006	6	59	485	5
[>	Tb	159		ug/L			464307	492520	1
[	Tl	205	u 0.006	ug/L	0.001	11	187	399	5
[	Pb	208	u 0.019	ug/L	0.002	9	817	1755	3
[	Bi	209		ug/L			395913	416875	0
[	Th	232	0.020	ug/L	0.004	21	1144	2442	9
[	U	238	0.075	ug/L	0.015	19	969	6204	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS55 MB1 REN
Sample Dil Factor: 2
Comments: EL 11-28-12
Sample Date/Time: Tuesday, November 27, 2012 18:13:50
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			326877	361014	2
Be	9	0.004	ug/L	0.006	133	5	7	33
C	13		mg/L			3627	5058	1
Cl	37		mg/L			2842363	2783387	0
Sc	45		ug/L			291358	292734	2
V	51	0.011	ug/L	0.006	52	1840	1984	2
V-1	51	0.159	ug/L	0.036	22	4859	6938	4
Cr	52	0.009	ug/L	0.012	132	6350	6477	1
Cr	53	0.460	ug/L	0.111	24	1683	2316	4
Mn	55	0.099	ug/L	0.005	5	495	2337	2
Co	59	-0.001	ug/L	0.001	43	67	50	12
Ge	72		ug/L			357527	357973	1
Ni	60	-0.009	ug/L	0.005	56	75	49	30
Ni	62	-0.237	ug/L	0.072	30	539	439	6
Cu	63	0.255	ug/L	0.010	3	596	2204	1
Cu	65	0.094	ug/L	0.007	7	88	374	4
Zn	66	0.582	ug/L	0.030	5	433	1540	2
Zn	67	0.734	ug/L	0.160	21	207	447	10
Zn	68	0.277	ug/L	0.149	53	7598	7985	1
As	75	0.011	ug/L	0.004	36	257	281	4
As-1	75	-0.190	ug/L	0.067	35	9096	8715	0
Se	82	0.163	ug/L	0.015	9	-17	18	16
Se	78	-0.728	ug/L	0.309	42	9240	8864	0
Mo	98	0.000	ug/L	0.000	291	28	29	6
Y	89		ug/L			347954	356831	1
Kr	83		ug/L			188	162	3
In	115		ug/L			388771	393998	1
Ag	107	0.001	ug/L	0.001	94	48	59	15
Cd	111	0.005	ug/L	0.008	151	243	263	10
Cd	114	0.000	ug/L	0.000	600	12	13	22
Sb	121	-0.004	ug/L	0.000	8	75	32	13
Sb	123	-0.004	ug/L	0.001	31	62	26	45
Ba	135	0.132	ug/L	0.006	4	37	405	4
Ba	137	0.124	ug/L	0.005	4	59	658	2
Tb	159		ug/L			464307	480040	0
Tl	205	0.003	ug/L	0.001	26	187	303	9
Pb	208	0.036	ug/L	0.002	6	817	2498	4
Bi	209		ug/L			395913	412584	1
Th	232	0.006	ug/L	0.001	16	1144	1534	3
U	238	0.037	ug/L	0.002	4	969	3513	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS44 MBSPK REN
Sample Dil Factor: 2 EL 11-28-12
Comments:
Sample Date/Time: Tuesday, November 27, 2012 18:20:09
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	388896	1
[	Be	9	23.970	ug/L	0.166	0	5	12310	1
	C	13		mg/L			3627	5691	3
	Cl	37		mg/L			2842363	2852712	0
[>	Sc	45		ug/L			291358	317772	1
[	V	51	25.185	ug/L	0.212	0	1840	348518	0
[	V-1	51	25.212	ug/L	0.219	0	4859	359928	0
[	Cr	52	25.231	ug/L	0.186	0	6350	315410	0
[	Cr	53	25.309	ug/L	0.538	2	1683	39290	2
[	Mn	55	25.152	ug/L	0.146	0	495	510284	0
[	Co	59	25.502	ug/L	0.126	0	67	393728	0
[>	Ge	72		ug/L			357527	376783	0
[	Ni	60	27.623	ug/L	0.370	1	75	82855	0
[	Ni	62	27.093	ug/L	0.721	2	539	12678	1
[	Cu	63	28.551	ug/L	0.491	1	596	189948	0
[	Cu	65	27.991	ug/L	0.231	0	88	89800	0
[	Zn	66	85.435	ug/L	0.337	0	433	171329	1
[	Zn	67	78.254	ug/L	0.505	0	207	27173	0
[	Zn	68	81.841	ug/L	0.336	0	7598	126225	0
[	As	75	26.811	ug/L	0.138	0	257	59473	0
[	As-1	75	25.220	ug/L	0.209	0	9096	64157	0
[	Se	82	81.247	ug/L	1.135	1	-17	19215	0
[	Se	78	79.176	ug/L	1.620	2	9240	53912	0
[	Mo	98	0.005	ug/L	0.000	7	28	73	3
	Y	89		ug/L			347954	379330	1
	Kr	83		ug/L			188	174	2
[>	In	115		ug/L			388771	414153	0
[	Ag	107	25.498	ug/L	0.373	1	48	343187	0
[	Cd	111	24.111	ug/L	0.207	0	243	84006	0
[	Cd	114	24.117	ug/L	0.332	1	12	193537	1
[	Sb	121	-0.002	ug/L	0.000	12	75	57	5
[	Sb	123	-0.003	ug/L	0.000	8	62	37	5
[	Ba	135	23.641	ug/L	0.285	1	37	69115	1
[	Ba	137	23.869	ug/L	0.142	0	59	120991	0
[>	Tb	159		ug/L			464307	514849	0
[	Tl	205	24.625	ug/L	0.116	0	187	919391	0
[	Pb	208	25.900	ug/L	0.148	0	817	1274738	0
[	Bi	209		ug/L			395913	440182	0
[	Th	232	23.850	ug/L	0.217	0	1144	1518127	1
[	U	238	23.272	ug/L	0.133	0	969	1686648	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 MB1SPK REN
Sample Dil Factor: 2 EL 11-28-12
Comments:
Sample Date/Time: Tuesday, November 27, 2012 18:26:28
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	390209	1
[	Be	9	25.076	ug/L	0.761	3	5	12917	1
	C	13		mg/L			3627	6594	1
	Cl	37		mg/L			2842363	2854864	0
[>	Sc	45		ug/L			291358	321992	2
[	V	51	26.256	ug/L	0.605	2	1840	367986	0
[	V-1	51	26.085	ug/L	0.552	2	4859	377066	0
[	Cr	52	25.862	ug/L	0.651	2	6350	327336	0
[	Cr	53	25.368	ug/L	0.526	2	1683	39892	1
[	Mn	55	25.345	ug/L	0.339	1	495	520973	1
[	Co	59	25.613	ug/L	0.535	2	67	400577	0
[>	Ge	72		ug/L			357527	382439	1
[	Ni	60	28.168	ug/L	0.150	0	75	85765	1
[	Ni	62	27.091	ug/L	0.406	1	539	12869	2
[	Cu	63	27.691	ug/L	0.308	1	596	187022	1
[	Cu	65	27.354	ug/L	0.070	0	88	89078	1
[	Zn	66	84.864	ug/L	0.902	1	433	172742	1
[	Zn	67	78.063	ug/L	0.912	1	207	27516	2
[	Zn	68	80.977	ug/L	0.642	0	7598	126849	0
[	As	75	27.407	ug/L	0.290	1	257	61696	0
[	As-1	75	25.789	ug/L	0.439	1	9096	66363	0
[	Se	82	83.107	ug/L	1.514	1	-17	19949	0
[	Se	78	81.065	ug/L	2.228	2	9240	55787	1
[	Mo	98	25.449	ug/L	0.185	0	28	211033	0
	Y	89		ug/L			347954	383748	1
	Kr	83		ug/L			188	185	5
[>	In	115		ug/L			388771	418462	1
[	Ag	107	25.517	ug/L	0.308	1	48	347015	1
[	Cd	111	24.376	ug/L	0.250	1	243	85815	2
[	Cd	114	24.343	ug/L	0.338	1	12	197361	0
[	Sb	121	23.559	ug/L	0.258	1	75	290594	0
[	Sb	123	23.576	ug/L	0.185	0	62	220896	1
[	Ba	135	24.270	ug/L	0.221	0	37	71689	1
[	Ba	137	23.920	ug/L	0.162	0	59	122517	2
[>	Tb	159		ug/L			464307	513599	1
[	Tl	205	25.043	ug/L	0.155	0	187	932648	1
[	Pb	208	26.311	ug/L	0.212	0	817	1291674	0
[	Bi	209		ug/L			395913	437698	0
[	Th	232	24.376	ug/L	0.410	1	1144	1547542	0
[	U	238	23.931	ug/L	0.220	0	969	1730276	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 MB2SPK REN
Sample Dil Factor: 2 ZR 11-28-12
Comments:
Sample Date/Time: Tuesday, November 27, 2012 18:32:45
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

ZR Be

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	398139	0
[	Be	9	24.411	ug/L	0.525	2	5	12835	2
	C	13		mg/L			3627	6831	2
	Cl	37		mg/L			2842363	2863594	0
[>	Sc	45		ug/L			291358	319745	1
[	V	51	26.576	ug/L	1.207	4	1840	369878	3
[	V-1	51	26.520	ug/L	1.156	4	4859	380596	3
[	Cr	52	26.539	ug/L	0.895	3	6350	333440	3
[	Cr	53	26.370	ug/L	0.741	2	1683	41106	1
[	Mn	55	27.071	ug/L	0.877	3	495	552494	2
[	Co	59	26.432	ug/L	0.891	3	67	410536	2
[>	Ge	72		ug/L			357527	381135	0
[	Ni	60	29.049	ug/L	0.465	1	75	88139	1
[	Ni	62	27.898	ug/L	0.627	2	539	13190	2
[	Cu	63	29.408	ug/L	0.961	3	596	197902	3
[	Cu	65	28.605	ug/L	0.844	2	88	92826	2
[	Zn	66	88.536	ug/L	3.019	3	433	179577	3
[	Zn	67	80.635	ug/L	2.700	3	207	28316	3
[	Zn	68	84.842	ug/L	1.847	2	7598	132069	1
[	As	75	27.773	ug/L	0.811	2	257	62308	2
[	As-1	75	26.090	ug/L	0.499	1	9096	66802	1
[	Se	82	83.313	ug/L	2.593	3	-17	19932	2
[	Se	78	81.005	ug/L	1.657	2	9240	55572	1
[	Mo	98	25.542	ug/L	0.219	0	28	211092	0
	Y	89		ug/L			347954	379854	0
	Kr	83		ug/L			188	185	4
[>	In	115		ug/L			388771	418614	1
[	Ag	107	25.937	ug/L	0.817	3	48	352815	2
[	Cd	111	24.524	ug/L	0.683	2	243	86351	1
[	Cd	114	24.623	ug/L	0.372	1	12	199721	1
[	Sb	121	23.975	ug/L	0.732	3	75	295819	2
[	Sb	123	23.758	ug/L	0.562	2	62	222679	1
[	Ba	135	24.405	ug/L	0.938	3	37	72098	2
[	Ba	137	24.171	ug/L	0.768	3	59	123815	2
[>	Tb	159		ug/L			464307	514750	0
[	Tl	205	25.477	ug/L	0.379	1	187	950949	0
[	Pb	208	26.695	ug/L	0.742	2	817	1313418	2
[	Bi	209		ug/L			395913	439577	1
[	Th	232	25.249	ug/L	0.870	3	1144	1606556	2
[	U	238	24.540	ug/L	0.812	3	969	1777859	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VQ37 R RHN
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 18:39:02
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
Li	6		ug/L			326877	326369	2
Be	9	0.022	ug/L	0.004	16	5	14	13
C	13		mg/L			3627	11634	3
Cl	37		mg/L			2842363	2501554	0
Sc	45		ug/L			291358	316866	5
V	51	0.559	ug/L	0.034	6	1840	9652	0
V-1	51	0.570	ug/L	0.039	6	4859	13254	1
Cr	52	0.159	ug/L	0.021	13	6350	8838	2
Cr	53	0.218	ug/L	0.037	16	1683	2150	2
Mn	55	48.623	ug/L	0.579	1	495	982955	4
Co	59	4.196	ug/L	0.091	2	67	64630	4
Ge	72		ug/L			357527	321929	3
Ni	60	2.881	ug/L	0.125	4	75	7452	7
Ni	62	2.004	ug/L	0.095	4	539	1251	4
Cu	63	10.318	ug/L	0.081	0	596	59004	4
Cu	65	10.350	ug/L	0.115	1	88	28428	4
Zn	66	113.328	ug/L	1.281	1	433	194099	4
Zn	67	99.448	ug/L	1.626	1	207	29466	5
Zn	68	109.658	ug/L	0.771	0	7598	142160	3
As	75	1.579	ug/L	0.009	0	257	3210	4
As-1	75	1.639	ug/L	0.143	8	9096	11216	1
Se	82	0.414	ug/L	0.068	16	-17	68	23
Se	78	0.565	ug/L	0.577	102	9240	8583	1
Mo	98	2.910	ug/L	0.043	1	28	20343	4
Y	89		ug/L			347954	323673	4
Kr	83		ug/L			188	170	3
In	115		ug/L			388771	343580	2
Ag	107	0.012	ug/L	0.001	11	48	179	7
Cd	111	0.693	ug/L	0.018	2	243	2212	3
Cd	114	0.692	ug/L	0.006	0	12	4616	1
Sb	121	0.509	ug/L	0.009	1	75	5219	3
Sb	123	0.507	ug/L	0.006	1	62	3954	3
Ba	135	34.637	ug/L	0.982	2	37	84027	5
Ba	137	34.730	ug/L	0.791	2	59	146083	5
Tb	159		ug/L			464307	437435	5
Tl	205	0.018	ug/L	0.001	3	187	755	8
Pb	208	0.141	ug/L	0.004	3	817	6664	6
Bi	209		ug/L			395913	368228	4
Th	232	0.080	ug/L	0.007	8	1144	5400	10
U	238	0.166	ug/L	0.006	3	969	11127	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS44 A REN
Sample Dil Factor: 2 EL 11-28-12
Comments:
Sample Date/Time: Tuesday, November 27, 2012 18:45:18
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

RR As x20

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	298310	0
[	Be	9	0.059	ug/L	0.005	8	5	27	6
	C	13		mg/L			3627	6724	1
	Cl	37		mg/L			2842363	2700042	0
[>	Sc	45		ug/L			291358	363650	1
[	V	51	3.994	ug/L	0.044	1	1840	65180	1
[	V-1	51	3.955	ug/L	0.039	0	4859	69734	1
[	Cr	52	1.202	ug/L	0.028	2	6350	24738	2
[	Cr	53	1.270	ug/L	0.040	3	1683	4251	0
[	Mn	55	1811.087	ug/L	25.256	1	495	42000124	0
[	Co	59	1.755	ug/L	0.025	1	67	31090	0
[>	Ge	72		ug/L			357527	327230	1
[	Ni	60	2.381	ug/L	0.089	3	75	6267	3
[	Ni	62	1.196	ug/L	0.103	8	539	958	3
[	Cu	63	1.727	ug/L	0.017	0	596	10494	1
[	Cu	65	1.486	ug/L	0.018	1	88	4218	2
[	Zn	66	2.862	ug/L	0.043	1	433	5368	2
[	Zn	67	5.474	ug/L	0.096	1	207	1827	2
[	Zn	68	5.383	ug/L	0.142	2	7598	13706	0
[	As	75	1392.432	ug/L	14.902	1	257	2670514	1
[	As-1	75	1420.515	ug/L	15.202	1	9096	2677804	1
[	Se	82	1.571	ug/L	0.114	7	-17	306	7
[	Se	78	0.031	ug/L	0.274	894	9240	8471	0
[	Mo	98	0.782	ug/L	0.015	1	28	5576	1
	Y	89		ug/L			347954	324474	0
	Kr	83		ug/L			188	168	5
[>	In	115		ug/L			388771	329508	1
[	Ag	107	0.009	ug/L	0.001	16	48	137	12
[	Cd	111	0.052	ug/L	0.008	16	243	349	7
[	Cd	114	0.006	ug/L	0.003	57	12	46	41
[	Sb	121	0.367	ug/L	0.010	2	75	3625	0
[	Sb	123	0.359	ug/L	0.013	3	62	2698	5
[	Ba	135	82.760	ug/L	0.625	0	37	192408	1
[	Ba	137	82.808	ug/L	1.297	1	59	333792	1
[>	Tb	159		ug/L			464307	413263	0
[	Tl	205	0.003	ug/L	0.000	14	187	266	5
[	Pb	208	U0.075	ug/L	0.001	1	817	3693	1
[	Bi	209		ug/L			395913	341238	0
[	Th	232	0.032	ug/L	0.001	3	1144	2673	2
[	U	238	0.057	ug/L	0.002	2	969	4160	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS44 B REN
Sample Dil Factor: 2 QL 11-28-12
Comments:
Sample Date/Time: Tuesday, November 27, 2012 18:51:34
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	339487	3
[	Be	9	0.006	ug/L	0.003	47	5	7	18
	C	13		mg/L			3627	9496	5
	Cl	37		mg/L			2842363	2713465	2
[>	Sc	45		ug/L			291358	331174	5
	V	51	0.215	ug/L	0.007	3	1840	5173	6
	V-1	51	0.211	ug/L	0.019	8	4859	8604	3
	Cr	52	0.165	ug/L	0.020	12	6350	9315	3
	Cr	53	0.156	ug/L	0.069	44	1683	2150	1
	Mn	55	34.566	ug/L	0.115	0	495	730658	5
[	Co	59	0.257	ug/L	0.008	3	67	4204	7
[>	Ge	72		ug/L			357527	329470	3
	Ni	60	3.448	ug/L	0.163	4	75	9116	8
	Ni	62	1.783	ug/L	0.060	3	539	1194	4
	Cu	63	2.219	ug/L	0.044	1	596	13417	4
	Cu	65	2.432	ug/L	0.022	0	88	6899	4
	Zn	66	7.903	ug/L	0.113	1	433	14219	3
	Zn	67	6.722	ug/L	0.163	2	207	2216	6
	Zn	68	7.208	ug/L	0.246	3	7598	16099	2
	As	75	5.935	ug/L	0.031	0	257	11696	4
	As-1	75	5.485	ug/L	0.119	2	9096	18756	3
	Se	82	1.461	ug/L	0.083	5	-17	286	9
	Se	78	-0.678	ug/L	0.378	55	9240	8180	2
[	Mo	98	1.729	ug/L	0.023	1	28	12380	4
	Y	89		ug/L			347954	332147	3
	Kr	83		ug/L			188	164	1
[>	In	115		ug/L			388771	359207	5
	Ag	107	0.001	ug/L	0.000	23	48	57	9
	Cd	111	0.008	ug/L	0.003	34	243	247	5
	Cd	114	0.007	ug/L	0.000	6	12	60	4
	Sb	121	0.221	ug/L	0.003	1	75	2406	4
	Sb	123	0.226	ug/L	0.005	2	62	1876	3
	Ba	135	1.709	ug/L	0.043	2	37	4369	7
[	Ba	137	1.730	ug/L	0.054	3	59	7657	6
[>	Tb	159		ug/L			464307	457735	3
	Tl	205	0.003	ug/L	0.000	7	187	296	6
	Pb	208	0.258	ug/L	0.002	0	817	12085	4
	Bi	209		ug/L			395913	378873	2
	Th	232	0.016	ug/L	0.003	16	1144	2019	4
[	U	238	0.110	ug/L	0.001	0	969	8026	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 18:57:51
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			326877	307159	2
[	Be	9	51.912	ug/L	1.092	2	5	21054	3
	C	13		mg/L			3627	3482	0
	Cl	37		mg/L			2842363	2571771	0
[>	Sc	45		ug/L			291358	242995	2
[	V	51	51.692	ug/L	0.285	0	1840	545466	2
[	V-1	51	51.793	ug/L	0.064	0	4859	561171	2
[	Cr	52	51.401	ug/L	0.576	1	6350	485800	1
[	Cr	53	51.725	ug/L	1.208	2	1683	59917	0
[	Mn	55	51.625	ug/L	0.630	1	495	800336	1
[	Co	59	51.115	ug/L	0.871	1	67	603246	0
[>	Ge	72		ug/L			357527	309906	1
[	Ni	60	52.471	ug/L	1.778	3	75	129369	2
[	Ni	62	51.490	ug/L	2.137	4	539	19393	3
[	Cu	63	52.768	ug/L	0.602	1	596	288305	1
[	Cu	65	51.615	ug/L	1.415	2	88	136144	3
[	Zn	66	52.719	ug/L	0.771	1	433	87092	1
[	Zn	67	52.004	ug/L	1.515	2	207	14913	3
[	Zn	68	51.347	ug/L	1.080	2	7598	67583	1
[	As	75	50.865	ug/L	0.576	1	257	92591	0
[	As-1	75	50.774	ug/L	0.556	1	9096	98237	0
[	Se	82	50.867	ug/L	1.332	2	-17	9887	1
[	Se	78	50.485	ug/L	1.119	2	9240	31174	0
[	Mo	98	49.822	ug/L	0.279	0	28	334771	1
	Y	89		ug/L			347954	297123	1
	Kr	83		ug/L			188	171	2
[>	In	115		ug/L			388771	329781	1
[	Ag	107	50.600	ug/L	0.621	1	48	542265	1
[	Cd	111	50.521	ug/L	0.349	0	243	139940	1
[	Cd	114	50.331	ug/L	0.772	1	12	321585	1
[	Sb	121	49.751	ug/L	0.721	1	75	483577	1
[	Sb	123	49.605	ug/L	0.649	1	62	366210	0
[	Ba	135	49.288	ug/L	0.865	1	37	114712	2
[	Ba	137	48.588	ug/L	0.453	0	59	196053	1
[>	Tb	159		ug/L			464307	415949	2
[	Tl	205	49.739	ug/L	0.884	1	187	1499843	2
[	Pb	208	52.415	ug/L	0.774	1	817	2083256	2
[	Bi	209		ug/L			395913	354930	1
[	Th	232	53.607	ug/L	1.100	2	1144	2755255	3
[	U	238	53.514	ug/L	0.669	1	969	3132259	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, November 27, 2012 19:04:29
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112712A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	**Li**	**6**		ug/L			326877	311903	2
	Be	**9**	**-0.001**	ug/L	0.005	350	5	4	45
	C	**13**		mg/L			3627	3441	1
	Cl	**37**		mg/L			2842363	2606002	0
>	**Sc**	**45**		ug/L			291358	243698	1
	V	**51**	**0.019**	ug/L	0.015	81	1840	1736	8
	V-1	**51**	**0.025**	ug/L	0.006	23	4859	4333	1
	Cr	**52**	**0.019**	ug/L	0.015	77	6350	5489	1
	Cr	**53**	**0.038**	ug/L	0.034	89	1683	1450	3
	Mn	**55**	**-0.001**	ug/L	0.002	128	495	392	5
	Co	**59**	**0.003**	ug/L	0.000	11	67	93	5
>	**Ge**	**72**		ug/L			357527	306602	1
	Ni	**60**	**0.005**	ug/L	0.001	27	75	76	5
	Ni	**62**	**-0.218**	ug/L	0.076	34	539	383	7
	Cu	**63**	**-0.004**	ug/L	0.002	45	596	487	2
	Cu	**65**	**0.017**	ug/L	0.002	14	88	119	5
	Zn	**66**	**0.082**	ug/L	0.011	13	433	506	4
	Zn	**67**	**0.081**	ug/L	0.016	19	207	200	3
	Zn	**68**	**0.321**	ug/L	0.018	5	7598	6892	0
	As	**75**	**0.025**	ug/L	0.004	17	257	265	4
	As-1	**75**	**0.151**	ug/L	0.085	56	9096	8065	0
	Se	**82**	**0.023**	ug/L	0.050	212	-17	-10	90
	Se	**78**	**0.540**	ug/L	0.325	60	9240	8168	0
	Mo	**98**	**0.002**	ug/L	0.001	39	28	39	16
	Y	**89**		ug/L			347954	298763	1
	Kr	**83**		ug/L			188	167	3
>	**In**	**115**		ug/L			388771	327992	0
	Ag	**107**	**-0.001**	ug/L	0.001	88	48	35	15
	Cd	**111**	**0.001**	ug/L	0.007	496	243	209	9
	Cd	**114**	**-0.000**	ug/L	0.001	801	12	10	41
	Sb	**121**	**0.008**	ug/L	0.003	39	75	145	22
	Sb	**123**	**0.006**	ug/L	0.003	51	62	99	24
	Ba	**135**	**0.002**	ug/L	0.003	168	37	35	21
	Ba	**137**	**0.002**	ug/L	0.003	126	59	58	18
>	**Tb**	**159**		ug/L			464307	413181	1
	Tl	**205**	**0.003**	ug/L	0.001	34	187	270	13
	Pb	**208**	**0.010**	ug/L	0.001	10	817	1117	2
	Bi	**209**		ug/L			395913	358008	1
	Th	**232**	**0.015**	ug/L	0.005	33	1144	1761	15
	U	**238**	**0.038**	ug/L	0.003	6	969	3049	4

End PKG

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

min method

Analysis Date: 11-28-12 **Analyst:** EL **Page:** 1 **of** 2

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD 0			2994-2
		-1			2993-4
		-2			↓ -5
		-3			2994-7
		↓ -4			2993-6
		RinseSample			
		ICV			2955-7 51 fe low
		ICB			
		CCV1			
		CCB1			
		LowCheck			
		ICSA			
		ICSAB			
		CCV2			
		CCB2			
		VR84 MB1	REN	2	
		↓ MB2			
		VR80 MB1			
		MB2			
		MB1Spk			✓
		↓ MB2Spk			✓
		VR84 MB1Spk			✓
		↓ MB2Spk			✓
		↓ B			

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 11-28-12 **Analyst:** EL **Page:** 2 of 2

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		VT84 B	REN	2	
		CCV3			
		11-29-12 CCV/CCB3			
		VR80 ADup	REN	2	✓ F-2
		A			
		ASplc			✓
		B			
		C			
		D			
		EDup			✓
		E			
		ESplc			✓
		F			
		CCV4			
		CCB4			
		JR80 G	REN	2	
		H			
		CCV4			
		CCB4			

11-29-12

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA

Analysis Date: 11.28-12

Elan - Minerals	Analyst 11-29-12	Peer 11/29/12	Comment
Logbook			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
Samples			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	✓	✓	
Matrix QC			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓		

ICP-MS Quantitative Analysis - Summary Report

✓ 11-29-12 JK

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 10:14:26
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas Intens.	Intens. RSD
	C	**13**		mg/L				3802	0
	Cl	**37**		mg/L				2409102	0
>	**Sc**	**45**		ug/L				231256	0
	Na	**23**		ug/L				45168	1
	Mg	**24**		ug/L				474	4
	Al	**27**		ug/L				6330	0
	K	**39**		ug/L				500011	0
	Ca	**43**		ug/L				251	4
	Fe	**54**		ug/L				18842	0
	Fe	**57**		ug/L				5596	1
	Co	**59**		mg/L				36	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 10:19:35
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc RSD	Blank Intens	Meas Intens	Intens RSD
	C	13		mg/L			3802	4076	2
	Cl	37		mg/L			2409102	2310563	0
>	Sc	45		ug/L			231256	203290	2
	Na	23	1000.000	ug/L	9.751	0	45168	4620759	2
	Mg	24	1000.000	ug/L	23 876	2	474	3202510	0
	Al	27	1000.000	ug/L	8.062	0	6330	4756412	2
	K	39	1000.000	ug/L	22 705	2	500011	7982508	0
	Ca	43	1000.000	ug/L	22 027	2	251	14518	0
	Fe	54	1000.000	ug/L	11.190	1	18842	662716	1
	Fe	57	1000.000	ug/L	9.529	0	5596	284974	1
	Co	59	10.000	mg/L	0.132	1	36	104583	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 10:24:43
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens. RSD
	C	13		mg/L			3802	4101	0
	Cl	37		mg/L			2409102	2350075	0
>	Sc	45		ug/L			231256	203132	1
	Na	23	1998.121	ug/L	12.040	0	45168	9152517	2
	Mg	24	2004.984	ug/L	13.275	0	474	6482940	2
	Al	27	2004.686	ug/L	43.746	2	6330	9608608	0
	K	39	1996.459	ug/L	51.708	2	500011	15383555	2
	Ca	43	2001.114	ug/L	15.462	0	251	28883	2
	Fe	54	2000.077	ug/L	18 474	0	18842	1308206	1
	Fe	57	1996.483	ug/L	29 914	1	5596	559793	2
	Co	59	19.926	mg/L	0.307	1	36	205157	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 10:29:52
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens	Intens. RSD
	C	**13**		mg/L			3802	3567	0
	Cl	**37**		mg/L			2409102	2377360	0
>	**Sc**	**45**		ug/L			231256	205344	0
	Na	**23**	**5033.675**	ug/L	48.000	0	45168	24055123	1
	Mg	**24**	**5013.669**	ug/L	102.826	2	474	16613994	2
	Al	**27**	**5006.864**	ug/L	39.686	0	6330	24424601	0
	K	**39**	**5028.557**	ug/L	83.717	1	500011	39621656	2
	Ca	**43**	**5000.835**	ug/L	101 447	2	251	72688	1
	Fe	**54**	**5092.493**	ug/L	19 598	0	18842	3680328	0
	Fe	**57**	**4993.365**	ug/L	33 118	0	5596	1398601	1
	Co	**59**	**50.078**	mg/L	0 325	0	36	525306	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 10:35:01
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens RSD
	C	13		mg/L			3802	3880	2
	Cl	37		mg/L			2409102	2434287	1
>	Sc	45		ug/L			231256	199797	1
	Na	23	10008.678	ug/L	434.531	4	45168	46621554	3
	Mg	24	10026.138	ug/L	309.719	3	474	32609229	3
	Al	27	10048.545	ug/L	38.560	0	6330	48476444	1
	K	39	9986.593	ug/L	206.608	2	500011	75789515	1
	Ca	43	9992.094	ug/L	229 114	2	251	140709	1
	Fe	54	10070.842	ug/L	324.106	3	18842	7234799	2
	Fe	57	10277.029	ug/L	258.948	2	5596	3079232	2
	Co	59	99.617	mg/L	0 748	0	36	1003822	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse Sample
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 10:39:55
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	**13**		mg/L			3802	3556	2
	Cl	**37**		mg/L			2409102	2455475	0
>	**Sc**	**45**		ug/L			231256	204912	0
	Na	**23**	**-0.798**	ug/L	0.094	11	45168	36210	0
	Mg	**24**	**-0.015**	ug/L	0.007	49	474	370	6
	Al	**27**	**0.000**	ug/L	0 008	1853	6330	5611	0
	K	**39**	**4.943**	ug/L	0.844	17	500011	481271	0
	Ca	**43**	**-0.034**	ug/L	1 000	2911	251	222	6
	Fe	**54**	**0.255**	ug/L	0.445	174	18842	16885	2
	Fe	**57**	**0.666**	ug/L	0.446	67	5596	5162	2
	Co	**59**	**0.001**	mg/L	0.001	82	36	47	25

Quantitative Analysis - Calibration Report

Sample Date/Time: Wednesday, November 28, 2012 10:39:55

Method File: C:\Elandata\Method\2008LoMinonly.mth

Tuning File: C:\Elandata\Tuning\default.tun

Optimization File: C:\Elandata\Optimize\default.dac

Calibration File: C:\Elandata\Calibration\112812M.cal

Analyte	Mass	r Corr Coeff	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Na	23	1.0000	0.0233	1000	2000	5000	10000	
Mg	24	1.0000	0.0163	1000	2000	5000	10000	
Al	27	1.0000	0.0241	1000	2000	5000	10000	
K	39	1.0000	0.0378	1000	2000	5000	10000	
Ca	43	1.0000	0.0001	1000	2000	5000	10000	
Fe	54	0.9997	0.0036	1000	2000	5000	10000	
Fe	57	0.9987	0.0015	1000	2000	5000	10000	
Co	59	1.0000	0.0504	10	20	50	100	

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 10:58:43
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc RSD	Blank Intens.	Meas Intens.	Intens. RSD
	C	13		mg/L			3802	7199	3
	Cl	37		mg/L			2409102	2494313	0
>	Sc	45		ug/L			231256	211611	2
	Na	23	4976.848	ug/L	15 813	0	45168	24578949	1
	Mg	24	4989.407	ug/L	82.261	1	474	17184190	1
	Al	27	4961.150	ug/L	98.287	1	6330	25345221	1
	K	39	5030.989	ug/L	51 347	1	500011	40663181	1
	Ca	43	4937.930	ug/L	73.573	1	251	73772	2
	Fe	54	5005.500	ug/L	108.821	2	18842	3817681	2
	Fe	57	4413.953	ug/L	88.746	2	5596	1403490	1
	Co	59	49.613	mg/L	0 616	1	36	529460	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:02:57
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas. Intens.	Intens. RSD
	C	13		mg/L			3802	3598	0
	Cl	37		mg/L			2409102	2506481	0
>	Sc	45		ug/L			231256	208703	1
	Na	23	-1.361	ug/L	0.148	10	45168	34142	2
	Mg	24	0.001	ug/L	0 012	2187	474	430	9
	Al	27	-0.011	ug/L	0.016	150	6330	5657	1
	K	39	4.201	ug/L	0.757	18	500011	484301	0
	Ca	43	-1.510	ug/L	0.333	22	251	204	3
	Fe	54	-0.205	ug/L	0.267	129	18842	16848	0
	Fe	57	0.829	ug/L	0.624	75	5596	5307	2
	Co	59	0.001	mg/L	0.001	131	36	39	20

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:06:20
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			3802	3483	2
	Cl	37		mg/L			2409102	2508001	0
>	Sc	45		ug/L			231256	208703	1
	Na	23	5086.025	ug/L	48.537	0	45168	24773999	2
	Mg	24	5126.870	ug/L	67 133	1	474	17420589	3
	Al	27	5098.987	ug/L	40.389	0	6330	25694850	1
	K	39	5112.192	ug/L	48.879	0	500011	40744250	1
	Ca	43	5016.051	ug/L	33 990	0	251	73904	1
	Fe	54	5124.386	ug/L	42.731	0	18842	3854148	1
	Fe	57	4598.849	ug/L	11 534	0	5596	1442241	1
	Co	59	50.252	mg/L	0.472	0	36	528943	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:10:34
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc RSD	Blank Intens.	Meas Intens.	Intens RSD
	C	**13**		mg/L			3802	3448	2
	Cl	**37**		mg/L			2409102	2504611	0
>	**Sc**	**45**		ug/L			231256	202553	2
	Na	**23**	**-1.418**	ug/L	0.217	15	45168	32853	0
	Mg	**24**	**-0.002**	ug/L	0 012	708	474	409	7
	Al	**27**	**0.036**	ug/L	0.037	103	6330	5716	1
	K	**39**	**5.639**	ug/L	1.050	18	500011	480965	0
	Ca	**43**	**-0.350**	ug/L	1.816	519	251	215	13
	Fe	**54**	**-0.053**	ug/L	0.486	909	18842	16459	1
	Fe	**57**	**1.288**	ug/L	0 389	30	5596	5291	1
	Co	**59**	**0.001**	mg/L	0.000	45	36	41	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:13:58
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			3802	3480	1
	Cl	37		mg/L			2409102	2518558	0
>	Sc	45		ug/L			231256	202501	0
	Na	23	88.516	ug/L	1 863	2	45168	457159	1
	Mg	24	19.157	ug/L	0.217	1	474	63561	1
	Al	27	18.065	ug/L	0.201	1	6330	93860	1
	K	39	24.494	ug/L	0.663	2	500011	625159	0
	Ca	43	53.059	ug/L	3.791	7	251	976	5
	Fe	54	19.968	ug/L	0 893	4	18842	31006	1
	Fe	57	21.033	ug/L	0 548	2	5596	11278	1
	Co	59	0.216	mg/L	0 008	3	36	2241	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:17:21
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	**13**		mg/L			3802	14367	0
	Cl	**37**		mg/L			2409102	4253156	1
>	**Sc**	**45**		ug/L			231256	216101	2
	Na	**23**	**20451.598**	ug/L	503.410	2	45168	103000944	2
	Mg	**24**	**20161.928**	ug/L	370.009	1	474	70925106	2
	Al	**27**	**20100.171**	ug/L	339.379	1	6330	104852255	1
	K	**39**	**20366.705**	ug/L	516.913	2	500011	166706706	3
	Ca	**43**	**19818.753**	ug/L	192.646	0	251	301651	1
	Fe	**54**	**20496.878**	ug/L	489.285	2	18842	15906172	0
	Fe	**57**	**20764.394**	ug/L	141.849	0	5596	6724755	2
	Co	**59**	**0.025**	mg/L	0.001	3	36	310	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:21:14
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas. Intens	Intens. RSD
	C	13		mg/L			3802	13713	1
	Cl	37		mg/L			2409102	4049254	0
>	Sc	45		ug/L			231256	200113	0
	Na	23	21022.695	ug/L	272 511	1	45168	98052224	0
	Mg	24	20418.445	ug/L	198 496	0	474	66508520	0
	Al	27	20457.962	ug/L	310.526	1	6330	98834082	0
	K	39	20832.455	ug/L	179 422	0	500011	157882595	0
	Ca	43	19957.307	ug/L	164.623	0	251	281304	0
	Fe	54	20938.964	ug/L	217.923	1	18842	15050866	0
	Fe	57	21795.368	ug/L	541 101	2	5596	6536418	2
	Co	59	20.251	mg/L	0 141	0	36	204417	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:25:07
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens. RSD
	C	13		mg/L			3802	3355	1
	Cl	37		mg/L			2409102	2289373	11
>	Sc	45		ug/L			231256	201065	1
	Na	23	5228.442	ug/L	30.121	0	45168	24532117	1
	Mg	24	5235.822	ug/L	13.852	0	474	17136637	1
	Al	27	5284.592	ug/L	130.995	2	6330	25651407	1
	K	39	5295.553	ug/L	61.077	1	500011	40654937	2
	Ca	43	5116.225	ug/L	13 900	0	251	72625	1
	Fe	54	5358.791	ug/L	58.399	1	18842	3882187	0
	Fe	57	4639.634	ug/L	28 903	0	5596	1401716	1
	Co	59	51.474	mg/L	0 722	1	36	521992	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:29:21
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			3802	3341	2
	Cl	37		mg/L			2409102	2448756	0
>	Sc	45		ug/L			231256	197609	1
	Na	23	-1.169	ug/L	0 089	7	45168	33212	0
	Mg	24	-0.005	ug/L	0.009	185	474	390	9
	Al	27	-0.017	ug/L	0 019	111	6330	5327	2
	K	39	5.853	ug/L	1 171	20	500011	470852	0
	Ca	43	-0.218	ug/L	0.898	411	251	211	6
	Fe	54	-0.744	ug/L	0 416	55	18842	15569	0
	Fe	57	1.023	ug/L	0.337	32	5596	5084	0
	Co	59	0.001	mg/L	0 001	79	36	42	22

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT84 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:43:35
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens	Meas. Intens.	Intens RSD
	C	13		mg/L			3802	4300	1
	Cl	37		mg/L			2409102	2467972	0
>	Sc	45		ug/L			231256	199040	1
	Na	23	4.575	ug/L	0 101	2	45168	60095	1
	Mg	24	1.564	ug/L	0.046	2	474	5475	2
	Al	27	0.127	ug/L	0.012	9	6330	6056	1
	K	39	9.242	ug/L	0.580	6	500011	499800	0
	Ca	43	7.436	ug/L	1.455	19	251	320	6
	Fe	54	8.176	ug/L	0.141	1	18842	22056	0
	Fe	57	3.745	ug/L	0.339	9	5596	5933	2
	Co	59	0.006	mg/L	0 001	15	36	87	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT84 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:47:28
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			3802	4233	1
	Cl	37		mg/L			2409102	2494757	0
>	Sc	45		ug/L			231256	208563	1
	Na	23	2.162	ug/L	0.369	17	45168	51223	2
	Mg	24	< 0.500	ug/L	0.026	5	474	2125	2
	Al	27	< 8.865	ug/L	0 107	1	6330	50341	0
	K	39	6.317	ug/L	1 085	17	500011	500625	0
	Ca	43	< 25.118	ug/L	2 673	10	251	595	5
	Fe	54	< 8.934	ug/L	0.640	7	18842	23676	1
	Fe	57	1.787	ug/L	0 513	28	5596	5603	1
	Co	59	0.001	mg/L	0 001	150	36	39	23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:51:20
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

Fe only

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	**13**		mg/L			3802	4632	1
	Cl	**37**		mg/L			2409102	2503996	0
>	**Sc**	**45**		ug/L			231256	209616	1
	Na	**23**	**-0.851**	ug/L	0.134	15	45168	36779	0
	Mg	**24**	**1.066**	ug/L	0.038	3	474	4068	3
	Al	**27**	**1.402**	ug/L	0.029	2	6330	12832	1
	K	**39**	**6.400**	ug/L	0.673	10	500011	503841	0
	Ca	**43**	**1.846**	ug/L	0.490	26	251	255	3
	Fe	**54**	**8.732**	ug/L	0.751	8	18842	23641	1
	Fe	**57**	**2.296**	ug/L	0 389	16	5596	5792	1
	Co	**59**	**0.005**	mg/L	0 001	12	36	81	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:55:12
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens	Meas Intens	Intens RSD
C	13		mg/L			3802	4867	1
Cl	37		mg/L			2409102	2487230	0
> Sc	45		ug/L			231256	213351	1
Na	23	31.661	ug/L	0.894	2	45168	199030	1
Mg	24	1.987	ug/L	0 006	0	474	7337	0
Al	27	2.804	ug/L	0 065	2	6330	20283	2
K	39	25.171	ug/L	1 385	5	500011	664073	1
Ca	43	24.084	ug/L	0 827	3	251	593	1
Fe	54	11.642	ug/L	0.762	6	18842	26292	1
Fe	57	3.140	ug/L	0.197	6	5596	6166	1
Co	59	0.003	mg/L	0.001	29	36	68	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 11:59:07
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens	Intens. RSD
	C	13		mg/L			3802	5566	1
	Cl	37		mg/L			2409102	2560265	0
>	Sc	45		ug/L			231256	225125	0
	Na	23	4878.075	ug/L	79.581	1	45168	25630962	1
	Mg	24	4906.288	ug/L	120.050	2	474	17980208	2
	Al	27	4831.468	ug/L	72 377	1	6330	26262936	0
	K	39	4916.388	ug/L	108 846	2	500011	42288950	2
	Ca	43	4843.671	ug/L	76.789	1	251	76993	1
	Fe	54	4801.448	ug/L	94.502	1	18842	3896557	1
	Fe	57	4216.427	ug/L	36.602	0	5596	1426777	0
	Co	59	24.487	mg/L	0 278	1	36	278058	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 12:03:01
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas Intens.	Intens. RSD
	C	13		mg/L			3802	5576	1
	Cl	37		mg/L			2409102	2464620	0
>	Sc	45		ug/L			231256	197391	0
	Na	23	5178.791	ug/L	32 842	0	45168	23856040	0
	Mg	24	5213.653	ug/L	52.918	1	474	16753520	1
	Al	27	5144.906	ug/L	28.839	0	6330	24524123	1
	K	39	5262.859	ug/L	51.335	0	500011	39662233	0
	Ca	43	5054.956	ug/L	91 932	1	251	70449	2
	Fe	54	5076.844	ug/L	23.417	0	18842	3612016	1
	Fe	57	4505.393	ug/L	77.736	1	5596	1336460	1
	Co	59	25.520	mg/L	0 398	1	36	254104	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT84 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 12:06:55
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas Intens.	Intens RSD
	C	13		mg/L			3802	5262	0
	Cl	37		mg/L			2409102	2521009	0
>	Sc	45		ug/L			231256	201585	1
	Na	23	4931.221	ug/L	53.258	1	45168	23199101	0
	Mg	24	4965.547	ug/L	126.425	2	474	16291109	1
	Al	27	4966.172	ug/L	94.734	1	6330	24171482	1
	K	39	4993.580	ug/L	46.575	0	500011	38453444	0
	Ca	43	4837.870	ug/L	33.536	0	251	68858	0
	Fe	54	4839.045	ug/L	44.630	0	18842	3516430	0
	Fe	57	4301.943	ug/L	81.851	1	5596	1303319	1
	Co	59	25.035	mg/L	0.448	1	36	254534	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT84 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 12:10:48
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			3802	5086	1
	Cl	37		mg/L			2409102	2533031	1
>	Sc	45		ug/L			231256	207458	0
	Na	23	5079.283	ug/L	75.136	1	45168	24592561	1
	Mg	24	5067.824	ug/L	41.521	0	474	17114429	0
	Al	27	4990.793	ug/L	90.932	1	6330	25002087	1
	K	39	5074.088	ug/L	102.816	2	500011	40207273	1
	Ca	43	4905.620	ug/L	84.999	1	251	71858	1
	Fe	54	4971.069	ug/L	62.238	1	18842	3717406	1
	Fe	57	4420.772	ug/L	39.896	0	5596	1378365	0
	Co	59	25.555	mg/L	0 286	1	36	267426	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT84 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 12:14:41
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens	Intens. RSD
	C	**13**		mg/L			3802	5830	2
	Cl	**37**		mg/L			2409102	2525266	0
>	**Sc**	**45**		ug/L			231256	232672	1
	Na	**23**	**16318.905**	ug/L	211.110	1	45168	88505435	1
	Mg	**24**	**3351.907**	ug/L	42.114	1	474	12694324	1
	Al	**27**	**2053.154**	ug/L	45.925	2	6330	11536651	0
	K	**39**	**1437.026**	ug/L	19 683	1	500011	13130741	1
	Ca	**43**	**9608.192**	ug/L	128.758	1	251	157581	0
	Fe	**54**	**2940.901**	ug/L	43 642	1	18842	2474116	1
	Fe	**57**	**2575.168**	ug/L	34.168	1	5596	902731	0
	Co	**59**	**1.403**	mg/L	0 023	1	36	16493	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT84 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 12:18:35
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc RSD	Blank Intens.	Meas Intens	Intens. RSD
	C	**13**		mg/L			3802	5226	1
	Cl	**37**		mg/L			2409102	2633992	0
>	**Sc**	**45**		ug/L			231256	245117	2
	Na	**23**	**17450.426**	ug/L	975.059	5	45168	99615520	2
	Mg	**24**	**2517.699**	ug/L	83.671	3	474	10040289	0
	Al	**27**	**84.925**	ug/L	2 329	2	6330	509036	0
	K	**39**	**1369.896**	ug/L	50.125	3	500011	13205245	1
	Ca	**43**	**9805.934**	ug/L	388.261	3	251	169346	2
	Fe	**54**	**49.166**	ug/L	2 621	5	18842	63176	1
	Fe	**57**	**59.531**	ug/L	3.231	5	5596	27763	2
	Co	**59**	**0.104**	mg/L	0.005	4	36	1325	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 12:22:28
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens	Meas. Intens.	Intens RSD
	C	13		mg/L			3802	3545	1
	Cl	37		mg/L			2409102	2675656	0
>	Sc	45		ug/L			231256	232895	0
	Na	23	5166.834	ug/L	129 068	2	45168	28085225	2
	Mg	24	5158.909	ug/L	82.420	1	474	19558011	1
	Al	27	5180.887	ug/L	17 334	0	6330	29136608	0
	K	39	5163.049	ug/L	41.444	0	500011	45918899	0
	Ca	43	5011.066	ug/L	77.665	1	251	82394	1
	Fe	54	5206.025	ug/L	21.802	0	18842	4369506	0
	Fe	57	4522.824	ug/L	67.331	1	5596	1583011	1
	Co	59	50.562	mg/L	0.632	1	36	593929	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 12:26:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens.	Intens RSD
	C	13		mg/L			3802	3515	1
	Cl	37		mg/L			2409102	2662972	0
>	Sc	45		ug/L			231256	224039	0
	Na	23	-1.780	ug/L	0.077	4	45168	34469	1
	Mg	24	0.018	ug/L	0.008	45	474	524	6
	Al	27	0.034	ug/L	0.019	55	6330	6317	2
	K	39	1.539	ug/L	0.273	17	500011	497418	0
	Ca	43	-1.909	ug/L	0.305	15	251	213	2
	Fe	54	-1.209	ug/L	0.545	45	18842	17283	3
	Fe	57	0.315	ug/L	0 471	149	5596	5528	3
	Co	59	0.001	mg/L	0.001	175	36	42	28

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 12:41:50
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
C	**13**		mg/L			3802	5783	1
Cl	**37**		mg/L			2409102	2638556	0
Sc	**45**		ug/L			231256	232505	0
Na	**23**	**5307.420**	ug/L	26 700	0	45168	28798008	0
Mg	**24**	**4734.437**	ug/L	33.448	0	474	17918532	0
Al	**27**	**113.283**	ug/L	1 463	1	6330	642240	1
K	**39**	**2153.341**	ug/L	13.956	0	500011	19412282	0
Ca	**43**	**10804.087**	ug/L	157.285	1	251	177054	1
Fe	**54**	**458.240**	ug/L	7.473	1	18842	401227	1
Fe	**57**	**482.263**	ug/L	12 402	2	5596	173520	2
Co	**59**	**0.158**	mg/L	0.007	4	36	1885	4

VR80 : 01012

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 12:45:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens RSD
	C	**13**		mg/L			3802	5556	2
	Cl	**37**		mg/L			2409102	2618101	0
>	**Sc**	**45**		ug/L			231256	227997	1
	Na	**23**	**5414.940**	ug/L	285.076	5	45168	28794494	3
	Mg	**24**	**4930.733**	ug/L	141.315	2	474	18295225	1
	Al	**27**	**114.432**	ug/L	2.235	1	6330	635984	0
	K	**39**	**2233.215**	ug/L	61.135	2	500011	19718762	1
	Ca	**43**	**11175.196**	ug/L	327.824	2	251	179527	1
	Fe	**54**	**476.134**	ug/L	14.044	2	18842	407983	1
	Fe	**57**	**493.723**	ug/L	13.843	2	5596	174029	1
	Co	**59**	**0.160**	mg/L	0.006	3	36	1871	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 12:49:34
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	**13**		mg/L			3802	6070	0
	Cl	**37**		mg/L			2409102	2683887	0
>	**Sc**	**45**		ug/L			231256	234112	0
	Na	**23**	**10365.117**	ug/L	238.823	2	45168	56581302	1
	Mg	**24**	**9846.395**	ug/L	246.441	2	474	37518059	1
	Al	**27**	**4948.884**	ug/L	75.081	1	6330	27974783	0
	K	**39**	**7209.543**	ug/L	62.826	0	500011	64252218	0
	Ca	**43**	**15806.915**	ug/L	290.152	1	251	260696	1
	Fe	**54**	**5429.632**	ug/L	125.936	2	18842	4579797	1
	Fe	**57**	**4780.322**	ug/L	103.306	2	5596	1681281	1
	Co	**59**	**23.979**	mg/L	0.383	1	36	283151	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 12:53:27
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas. Intens.	Intens RSD
	C	13		mg/L			3802	5846	0
	Cl	37		mg/L			2409102	2655368	0
>	Sc	45		ug/L			231256	237442	1
	Na	23	5362.316	ug/L	64.405	1	45168	29710832	1
	Mg	24	4805.331	ug/L	96.525	2	474	18571427	1
	Al	27	65.506	ug/L	0.767	1	6330	382045	2
	K	39	1843.314	ug/L	31 785	1	500011	17041434	0
	Ca	43	10751.022	ug/L	108.035	1	251	179918	1
	Fe	54	327.903	ug/L	6.698	2	18842	298659	0
	Fe	57	339.189	ug/L	9 456	2	5596	126310	1
	Co	59	0.086	mg/L	0.001	1	36	1073	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 12:57:18
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	**13**		mg/L			3802	6012	2
	Cl	**37**		mg/L			2409102	2683776	0
>	**Sc**	**45**		ug/L			231256	239095	0
	Na	**23**	**5542.129**	ug/L	30.106	0	45168	30921364	0
	Mg	**24**	**4934.497**	ug/L	77.966	1	474	19205538	1
	Al	**27**	**59.281**	ug/L	0.435	0	6330	348735	0
	K	**39**	**1896.845**	ug/L	16.582	0	500011	17646584	0
	Ca	**43**	**11091.908**	ug/L	125.699	1	251	186923	1
	Fe	**54**	**325.248**	ug/L	3.205	0	18842	298519	0
	Fe	**57**	**339.157**	ug/L	1.857	0	5596	127214	0
	Co	**59**	**0.088**	mg/L	0.001	1	36	1096	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 13:01:10
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens	Meas. Intens	Intens RSD
	C	13		mg/L			3802	5946	0
	Cl	37		mg/L			2409102	2669794	0
>	Sc	45		ug/L			231256	239034	2
	Na	23	5021.830	ug/L	112.321	2	45168	28009504	1
	Mg	24	4182.828	ug/L	55.145	1	474	16273369	1
	Al	27	28.277	ug/L	4.563	16	6330	169507	14
	K	39	1280.666	ug/L	13.495	1	500011	12077240	1
	Ca	43	9965.228	ug/L	148 006	1	251	167885	0
	Fe	54	157.962	ug/L	4.501	2	18842	154909	0
	Fe	57	168.959	ug/L	2.419	1	5596	66250	1
	Co	59	0.054	mg/L	0 002	3	36	694	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 EDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 13:05:05
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens.	Intens RSD
	C	13		mg/L			3802	6318	2
	Cl	37		mg/L			2409102	2688878	0
>	Sc	45		ug/L			231256	243835	1
	Na	23	5496.508	ug/L	135.686	2	45168	31268035	1
	Mg	24	4850.615	ug/L	87.220	1	474	19252953	2
	Al	27	47.943	ug/L	0 520	1	6330	288873	0
	K	39	2233.635	ug/L	36.183	1	500011	21095297	0
	Ca	43	11232.144	ug/L	202 120	1	251	193019	1
	Fe	54	119.035	ug/L	3 666	3	18842	123986	1
	Fe	57	132.600	ug/L	6.466	4	5596	54301	3
	Co	59	0.046	mg/L	0.004	7	36	607	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 13:09:00
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	**13**		mg/L			3802	6274	0
	Cl	**37**		mg/L			2409102	2689744	1
>	**Sc**	**45**		ug/L			231256	250879	2
	Na	**23**	**5352.255**	ug/L	200.499	3	45168	31322612	2
	Mg	**24**	**4661.576**	ug/L	128.346	2	474	19033838	2
	Al	**27**	**46.005**	ug/L	0.814	1	6330	285446	0
	K	**39**	**2119.929**	ug/L	45 029	2	500011	20626370	1
	Ca	**43**	**10884.871**	ug/L	329.470	3	251	192412	1
	Fe	**54**	**113.052**	ug/L	4.258	3	18842	122164	1
	Fe	**57**	**122.351**	ug/L	3.173	2	5596	52035	3
	Co	**59**	**0.047**	mg/L	0.001	2	36	630	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 ESPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 13:12:54
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc RSD	Blank Intens	Meas Intens.	Intens. RSD
	C	13		mg/L			3802	6053	2
	Cl	37		mg/L			2409102	2734764	1
>	Sc	45		ug/L			231256	244361	1
	Na	23	10277.649	ug/L	236.661	2	45168	58553108	1
	Mg	24	9738.246	ug/L	205 608	2	474	38744385	3
	Al	27	4971.747	ug/L	65.941	1	6330	29335718	1
	K	39	7158.727	ug/L	84.972	1	500011	66595513	1
	Ca	43	15756.998	ug/L	256.701	1	251	271305	2
	Fe	54	5030.341	ug/L	103 081	2	18842	4430075	1
	Fe	57	4354.177	ug/L	63.308	1	5596	1598946	0
	Co	59	24.082	mg/L	0.175	0	36	296823	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 13:16:48
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
	C	13		mg/L			3802	6008	1
	Cl	37		mg/L			2409102	2697514	0
>	Sc	45		ug/L			231256	249143	1
	Na	23	5268.093	ug/L	119.104	2	45168	30623649	1
	Mg	24	4664.625	ug/L	121 191	2	474	18912525	0
	Al	27	11.492	ug/L	0.146	1	6330	75933	0
	K	39	1765.642	ug/L	39.212	2	500011	17151361	1
	Ca	43	10392.808	ug/L	114.218	1	251	182497	0
	Fe	54	151.599	ug/L	1.120	0	18842	155823	1
	Fe	57	164.195	ug/L	3.082	1	5596	67274	0
	Co	59	0.049	mg/L	0 001	1	36	656	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 13:20:43
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas. Intens	Intens. RSD
	C	13		mg/L			3802	3502	0
	Cl	37		mg/L			2409102	2726832	0
>	Sc	45		ug/L			231256	229815	1
	Na	23	5217.024	ug/L	139.221	2	45168	27973985	1
	Mg	24	5218.362	ug/L	45 553	0	474	19523389	2
	Al	27	5358.443	ug/L	73.570	1	6330	29732918	0
	K	39	5311.364	ug/L	51.813	0	500011	46596303	0
	Ca	43	5125.714	ug/L	89.200	1	251	83149	0
	Fe	54	5273.581	ug/L	146 986	2	18842	4366406	1
	Fe	57	4640.415	ug/L	42.242	0	5596	1602439	1
	Co	59	51.259	mg/L	1.131	2	36	594082	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 13:24:57
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc RSD	Blank Intens	Meas. Intens.	Intens. RSD
	C	13		mg/L			3802	3438	1
	Cl	37		mg/L			2409102	2746624	0
>	Sc	45		ug/L			231256	229322	0
	Na	23	-2.504	ug/L	0.148	5	45168	31409	1
	Mg	24	0.034	ug/L	0.005	14	474	598	3
	Al	27	0.020	ug/L	0 025	127	6330	6387	1
	K	39	1.204	ug/L	0.585	48	500011	506228	0
	Ca	43	-1.411	ug/L	1.446	102	251	226	9
	Fe	54	-1.053	ug/L	0.289	27	18842	17816	0
	Fe	57	0.311	ug/L	0.281	90	5596	5656	1
	Co	59	0.000	mg/L	0.001	356	36	40	35

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 13:45:54
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens. RSD
	C	13		mg/L			3802	5979	0
	Cl	37		mg/L			2409102	2611185	0
>	Sc	45		ug/L			231256	238713	1
	Na	23	5346.971	ug/L	124.049	2	45168	29779830	0
	Mg	24	4713.618	ug/L	58 585	1	474	18315567	1
	Al	27	10.569	ug/L	0 176	1	6330	67436	0
	K	39	1742.444	ug/L	21 631	1	500011	16224539	0
	Ca	43	10516.233	ug/L	185.481	1	251	176939	1
	Fe	54	153.290	ug/L	6.497	4	18842	150697	2
	Fe	57	163.276	ug/L	2.065	1	5596	64147	2
	Co	59	0.044	mg/L	0.003	7	36	572	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, November 28, 2012 13:49:49
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas. Intens.	Intens RSD
C	13		mg/L			3802	5710	0
Cl	37		mg/L			2409102	2638773	0
> Sc	45		ug/L			231256	233849	2
Na	23	**4941.166**	ug/L	157 737	3	45168	26958506	2
Mg	24	**4024.900**	ug/L	59.799	1	474	15319848	2
Al	27	**13.670**	ug/L	0 368	2	6330	83571	3
K	39	**1213.255**	ug/L	29.929	2	500011	11218398	1
Ca	43	**9644.439**	ug/L	92.215	0	251	158996	2
Fe	54	**90.380**	ug/L	3.275	3	18842	94859	2
Fe	57	**99.585**	ug/L	1 511	1	5596	40522	1
Co	59	**0.039**	mg/L	0.001	3	36	501	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 13:53:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens	Meas. Intens	Intens. RSD
	C	13		mg/L			3802	3382	1
	Cl	37		mg/L			2409102	2678401	0
>	Sc	45		ug/L			231256	228276	0
	Na	23	**5264.776**	ug/L	89.824	1	45168	28047067	1
	Mg	24	**5207.817**	ug/L	10.499	0	474	19351787	0
	Al	27	**5227.861**	ug/L	65.311	1	6330	28815576	0
	K	39	**5199.811**	ug/L	70.462	1	500011	45322564	0
	Ca	43	**5087.366**	ug/L	47.852	0	251	81986	1
	Fe	54	**5232.637**	ug/L	128.603	2	18842	4304694	2
	Fe	57	**4598.671**	ug/L	87.223	1	5596	1577391	1
	Co	59	**50.649**	mg/L	0 562	1	36	583138	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, November 28, 2012 13:57:56
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoMinonly.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112812M.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas Intens.	Intens. RSD
	C	13		mg/L			3802	3520	3
	Cl	37		mg/L			2409102	2713486	0
>	Sc	45		ug/L			231256	230136	0
	Na	23	-2.694	ug/L	0 037	1	45168	30505	0
	Mg	24	0.020	ug/L	0.008	42	474	545	5
	Al	27	-0.004	ug/L	0.017	415	6330	6277	1
	K	39	0.879	ug/L	0.318	36	500011	505223	0
	Ca	43	-3.063	ug/L	0 199	6	251	200	1
	Fe	54	-0.601	ug/L	0.241	40	18842	18254	0
	Fe	57	0.580	ug/L	0 328	56	5596	5769	2
	Co	59	-0.000	mg/L	0 001	895	36	35	26

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Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 11-29-12 **Analyst:** EC **Page:** 1 of 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD0			Z994-2
		-1			Z993-4
		-2			↓ -5
		-3			Z995-11
		↓ -4			Z993-6
		RinseSample			
		ICV			Z995-7
		ICB			
		CCV1			
		CCB1			
		Low Check			
		ICSA			
		ICSAB			
		LR200			
		LR300			
		CCV2			ALIS high
		CCB2			
	✓	VS66 MB1	REN	2	RR
	↓	MB2	↓	↓	↓
		MB3			
		MB1spk			
		MB2spk			
		↓ MB3spk			
	↓	VR63 Q	↓	↓	↓

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 11-29-12 **Analyst:** GC **Page:** 2 of 4

All corrections made by analyst unless otherwise noted. GC 11-30-12

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	V555 A	REN	10	RR
	↓	V564 A	↓	20	↓
	↓	V566 A	↓	2	
		CCV3			
		CCB3			
		V566MB4	REN	2	Cu = 0.803 ppb
		↓ MB4SDL	↓	↓	
	✓	V564 ADup		10	RR x20 - Cr Schigh
	↓	A		↓	↓
	↓	A5DL			↓
	↓	B			↓
		C			
	✓	D			RR x20 Cr Schigh
	✓	↓ H		↓	↓
	✓	V566B	↓	2	All IS high RR
		CCV4			
		CCB4			V2, Cr^{53} high
	✓	VR630	RHN	2	All IS High RR x10
	✓	↓ T	↓	10	" " RR x20
	✓	↓ W	↓	10	" " "
	✓	V536C	REN	2	
	✓	VR50MB2SDL		↓	Li high RR Be
	✓	V544A		20	Be high RR As x50
	✓	VR30ADup	↓	2	All IS high RR x10

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 11-29-12 **Analyst:** EC 11-30-12 **Page:** 3 of 4

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	VR80A	REN	2	All IS high RR x10
	✓	ASpk	↓	↓	↓
	✓	B	↓	↓	↓
		CCV5			
		CCB5			
		VR80C	REN	2	RR Cr, Mn
		D	↓		↓
		EDup		✓	
		E			
		ESpk		✓	
		F			
		G			
		H			↓
		VS14 I	↓	↓	RR Cr x10
	✓	VR65B	SCN	20	RR Ag, Cd Sb x50
		CCV6			Sc high
		CCB6			
	✓	VQ39A	RHN	2	RR Mn x10
		VS47B	REN	50	
		VR63ADup	RHN	20 ✓	RR Mn x20
		A	↓	↓	↓
		ASpk			En STL
		MRup		✓	
		M	↓	↓	↓

11-30-12

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP (ICP-MS) GFA CVA Analysis Date: 11-29-12

Elan	Analyst 11-30-12	Peer 11-30-12	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	See log
ICB/CCB	✓	—	
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	See log
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	—	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	—	VS66
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	—	AN-All CAF VS66

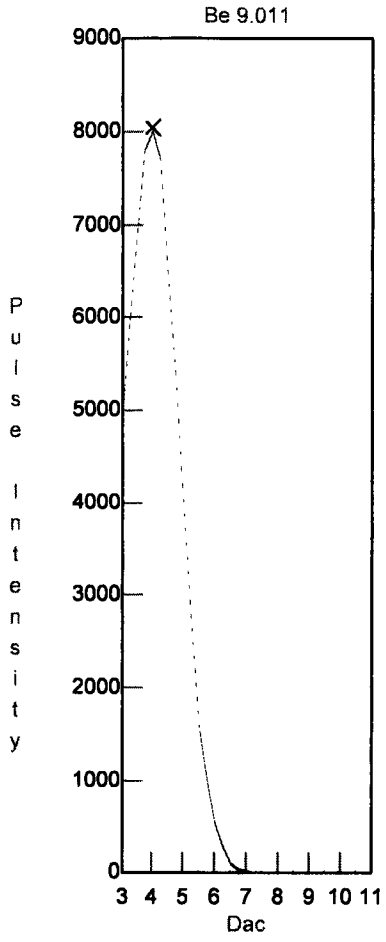
D.D. - 1st

Instrument Tuning Report

File Name: Default.tun
File Path: C:\Elandata\Tuning\Default.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	8.976	2021	2158	0.692	
Mg	23.985	23.979	5660	2265	0.683	
Co	58.933	58.929	14166	2532	0.705	
In	114.904	114.928	27804	2979	0.701	
Pb	207.977	207.976	50446	3725	0.704	

11-29-12 - 2 (0.1%)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7000
6000
5000
4000
3000
2000
1000
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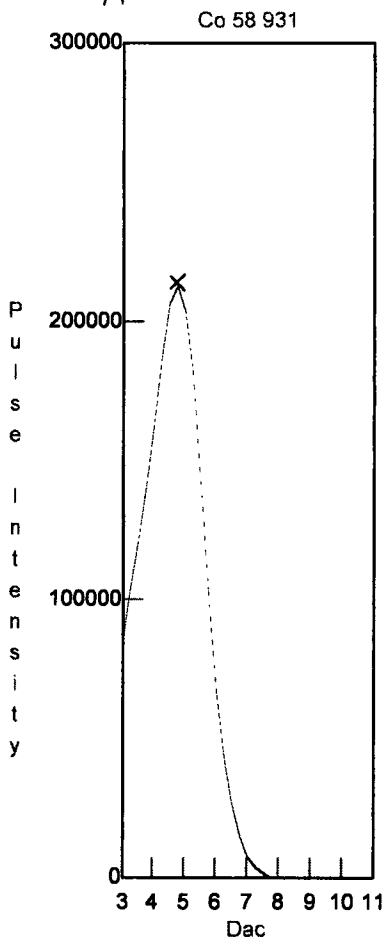
3 4 5 6 7 8 9 10 11
Dac


Co 58 931
Pulse Intensity
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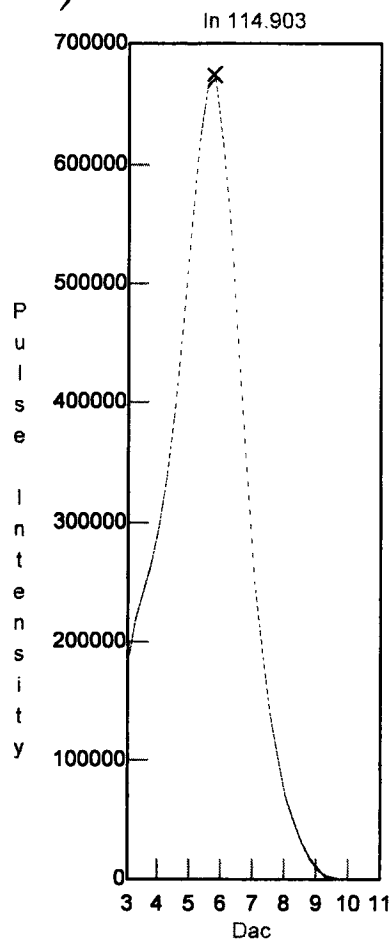
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac


In 114.903
Pulse Intensity
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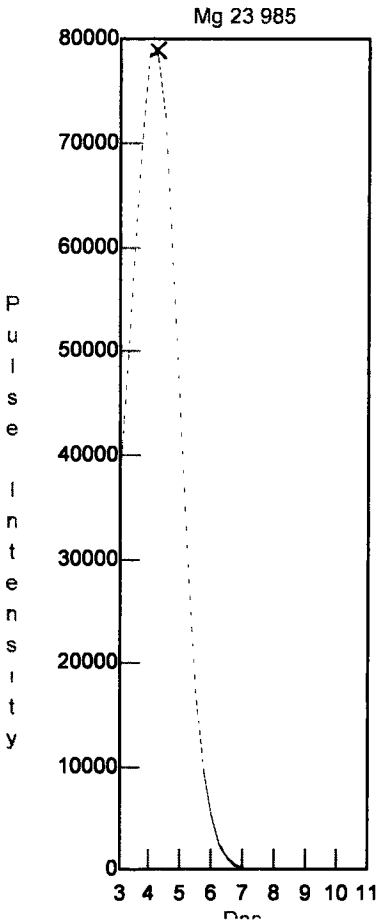
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac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Pulse Intensity
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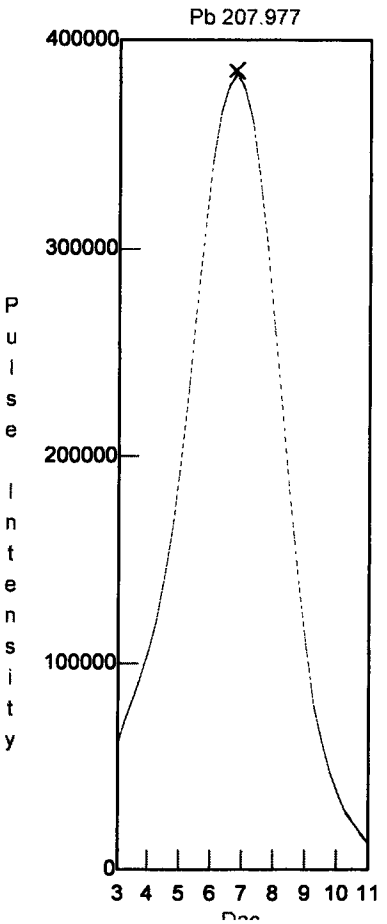
30000
20000
10000
0
3 4 5 6 7 8 9 10 11


Pb 207.977
Pulse Intensity
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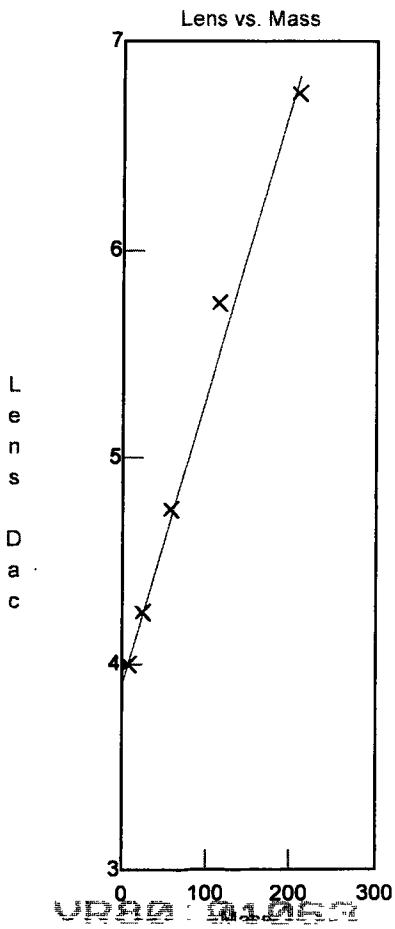
300000
200000
100000
0
3 4 5 6 7 8 9 10 11


Lens vs. Mass
Lens Dac
7
6
5
4
3
0
100
200
300

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, November 29, 2012 11:01:10
Sample Description:
Sample File: C:\Elandata\Sample\1119.sam
Method File: C:\Elandata\Method\aridailyperf.mth
Dataset File: C:\Elandata\Dataset\daily performance\Sample.1205
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\Default.dac
Number of Replicates: 5
Dual Detector Mode: Dual

0.81

Summary

	Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24	35869.963	395.948	1.104
	In	115	306651.318	3815.344	1.244
	Pb	208	179832.490	3129.940	1.740
⌈>	Ba	138	232792.345	1434.686	0.616
⌊	Ba++	69	0.012	0.000	2.069
⌈>	Ce	140	281576.537	2959.323	1.051
⌊	CeO	156	0.030	0.000	1.645
	Bkgd	220	9.251	5.274	57.014

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB1 REN
Sample Dil Factor: 2 Dil
Comments:
Sample Date/Time: Thursday, November 29, 2012 13:20:48
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	256263	2
[	Be	9	-0.009	ug/L	0.009	103	7	5	58
	C	13		mg/L			3587	3726	0
	Cl	37		mg/L			2863468	3008898	0
[>	Sc	45		ug/L			195484	204765	2
|	V	51	-0.003	ug/L	0.005	155	1040	1061	3
|	V-1	51	0.028	ug/L	0.005	18	3029	3437	1
|	Cr	52	0.003	ug/L	0.005	170	3579	3775	3
|	Cr	53	0.099	ug/L	0.017	17	1040	1186	2
|	Mn	55	0.133	ug/L	0.003	2	730	2528	2
[	Co	59	0.000	ug/L	0.001	2578	99	104	9
[>	Ge	72		ug/L			272490	282081	2
|	Ni	60	0.001	ug/L	0.004	330	85	90	12
|	Ni	62	-0.003	ug/L	0.012	400	50	51	9
|	Cu	63	0.072	ug/L	0.012	17	308	683	10
|	Cu	65	0.086	ug/L	0.017	19	120	330	10
|	Zn	66	0.951	ug/L	0.034	3	338	1847	3
|	Zn	67	0.808	ug/L	0.049	6	126	345	5
|	Zn	68	0.725	ug/L	0.053	7	5436	6432	2
|	As	75	-0.005	ug/L	0.016	331	318	321	9
|	As-1	75	-0.028	ug/L	0.051	179	6563	6744	1
|	Se	82	0.018	ug/L	0.037	200	-17	-15	37
|	Se	78	-0.202	ug/L	0.232	114	6620	6775	1
[	Mo	98	-0.021	ug/L	0.008	39	298	189	27
	Y	89		ug/L			246203	257951	2
	Kr	83		ug/L			174	163	0
[>	In	115		ug/L			260797	269145	1
|	Ag	107	0.005	ug/L	0.001	24	39	82	14
|	Cd	111	0.001	ug/L	0.008	815	144	150	12
|	Cd	114	-0.001	ug/L	0.001	71	18	13	34
|	Sb	121	0.007	ug/L	0.005	65	136	207	22
|	Sb	123	0.007	ug/L	0.005	77	117	170	24
|	Ba	135	0.010	ug/L	0.003	32	25	45	12
[	Ba	137	0.011	ug/L	0.010	91	52	91	35
[>	Tb	159		ug/L			324505	339497	3
|	Tl	205	0.007	ug/L	0.003	37	40	210	32
|	Pb	208	0.013	ug/L	0.000	3	384	809	2
|	Bi	209		ug/L			267172	279331	2
|	Th	232	0.046	ug/L	0.012	26	145	1869	26
[	U	238	0.001	ug/L	0.000	27	41	71	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 13:27:06
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	258976	3
[	Be	9	0.012	ug/L	0.011	94	7	12	33
	C	13		mg/L			3587	4114	2
	Cl	37		mg/L			2863468	3029957	1
[>	Sc	45		ug/L			195484	214039	6
|	V	51	0.003	ug/L	0.014	418	1040	1176	17
|	V-1	51	0.010	ug/L	0.024	242	3029	3403	1
|	Cr	52	0.061	ug/L	0.020	32	3579	4434	2
|	Cr	53	0.078	ug/L	0.122	157	1040	1213	3
|	Mn	55	0.002	ug/L	0.002	163	730	819	2
[	Co	59	-0.000	ug/L	0.001	5774	99	108	4
[>	Ge	72		ug/L			272490	287961	5
|	Ni	60	-0.006	ug/L	0.002	43	85	77	4
|	Ni	62	0.017	ug/L	0.016	94	50	58	3
|	Cu	63	0.865	ug/L	0.021	2	308	4790	3
|	Cu	65	0.900	ug/L	0.067	7	120	2314	1
|	Zn	66	0.843	ug/L	0.056	6	338	1709	0
|	Zn	67	0.720	ug/L	0.043	5	126	328	2
|	Zn	68	0.464	ug/L	0.269	57	5436	6259	0
|	As	75	-0.009	ug/L	0.015	164	318	322	13
|	As-1	75	-0.052	ug/L	0.240	458	6563	6828	0
|	Se	82	0.062	ug/L	0.131	213	-17	-8	253
|	Se	78	-0.260	ug/L	1.115	428	6620	6878	0
[	Mo	98	-0.027	ug/L	0.001	5	298	156	3
	Y	89		ug/L			246203	266248	4
	Kr	83		ug/L			174	164	5
[>	In	115		ug/L			260797	277440	6
|	Ag	107	0.003	ug/L	0.001	26	39	67	15
|	Cd	111	0.005	ug/L	0.005	111	144	164	1
|	Cd	114	-0.001	ug/L	0.002	237	18	16	47
|	Sb	121	0.000	ug/L	0.001	873	136	145	9
|	Sb	123	-0.001	ug/L	0.002	311	117	120	5
|	Ba	135	0.019	ug/L	0.003	13	25	66	14
[	Ba	137	0.019	ug/L	0.003	16	52	124	14
[>	Tb	159		ug/L			324505	351856	4
|	Tl	205	0.004	ug/L	0.001	22	40	138	11
|	Pb	208	0.006	ug/L	0.002	28	384	614	7
|	Bi	209		ug/L			267172	288620	4
|	Th	232	0.035	ug/L	0.005	14	145	1505	9
[	U	238	0.000	ug/L	0.000	105	41	54	16

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB3 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 13:33:23
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	255135	1
[	Be	9	-0.003	ug/L	0.010	370	7	7	44
	C	13		mg/L			3587	3688	2
	Cl	37		mg/L			2863468	3024752	0
[>	Sc	45		ug/L			195484	210597	1
[	V	51	-0.011	ug/L	0.008	78	1040	1017	6
[	V-1	51	-0.003	ug/L	0.017	575	3029	3234	3
[	Cr	52	-0.007	ug/L	0.004	60	3579	3795	1
[	Cr	53	0.017	ug/L	0.029	172	1040	1137	1
[	Mn	55	0.019	ug/L	0.002	11	730	1044	1
[	Co	59	0.008	ug/L	0.002	19	99	194	9
[>	Ge	72		ug/L			272490	280723	0
[	Ni	60	0.001	ug/L	0.003	237	85	90	6
[	Ni	62	-0.010	ug/L	0.022	225	50	48	14
[	Cu	63	0.089	ug/L	0.006	6	308	765	3
[	Cu	65	0.095	ug/L	0.010	10	120	350	6
[	Zn	66	0.937	ug/L	0.030	3	338	1817	2
[	Zn	67	0.788	ug/L	0.046	5	126	338	3
[	Zn	68	0.625	ug/L	0.049	7	5436	6290	1
[	As	75	-0.008	ug/L	0.004	45	318	314	1
[	As-1	75	-0.028	ug/L	0.025	89	6563	6713	0
[	Se	82	0.017	ug/L	0.018	105	-17	-15	18
[	Se	78	-0.138	ug/L	0.095	68	6620	6768	0
[	Mo	98	-0.041	ug/L	0.001	2	298	69	8
	Y	89		ug/L			246203	257399	0
	Kr	83		ug/L			174	169	2
[>	In	115		ug/L			260797	270940	1
[	Ag	107	0.005	ug/L	0.002	35	39	86	19
[	Cd	111	0.004	ug/L	0.008	198	144	158	11
[	Cd	114	0.003	ug/L	0.001	31	18	36	15
[	Sb	121	-0.003	ug/L	0.003	104	136	117	22
[	Sb	123	-0.005	ug/L	0.001	15	117	85	5
[	Ba	135	0.002	ug/L	0.001	65	25	31	10
[	Ba	137	0.007	ug/L	0.002	23	52	77	6
[>	Tb	159		ug/L			324505	347364	1
[	Tl	205	0.005	ug/L	0.001	15	40	169	9
[	Pb	208	0.007	ug/L	0.000	7	384	625	3
[	Bi	209		ug/L			267172	283401	1
[	Th	232	0.017	ug/L	0.001	4	145	822	3
[	U	238	0.004	ug/L	0.000	13	41	193	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB1SPK REN
Sample Dil Factor: 2 Dil
Comments:
Sample Date/Time: Thursday, November 29, 2012 13:39:40
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	250739	1
[	Be	9	24.525	ug/L	0.234	0	7	8632	2
	C	13		mg/L			3587	4301	1
	Cl	37		mg/L			2863468	3019646	0
[>	Sc	45		ug/L			195484	203953	1
|	V	51	25.649	ug/L	0.555	2	1040	236993	3
|	V-1	51	25.495	ug/L	0.459	1	3029	241685	3
|	Cr	52	25.179	ug/L	0.545	2	3579	209233	3
|	Cr	53	24.731	ug/L	0.235	0	1040	25143	2
|	Mn	55	25.538	ug/L	0.285	1	730	338862	2
[	Co	59	25.573	ug/L	0.460	1	99	257748	2
[>	Ge	72		ug/L			272490	277047	0
|	Ni	60	26.096	ug/L	1.141	4	85	56099	4
|	Ni	62	25.804	ug/L	0.297	1	50	8378	1
|	Cu	63	27.506	ug/L	0.572	2	308	136941	1
|	Cu	65	27.816	ug/L	0.497	1	120	65369	1
|	Zn	66	83.521	ug/L	1.597	1	338	129512	2
|	Zn	67	74.818	ug/L	2.602	3	126	19649	3
|	Zn	68	81.149	ug/L	1.598	1	5436	93857	1
|	As	75	26.426	ug/L	0.771	2	318	45792	2
|	As-1	75	25.500	ug/L	0.592	2	6563	49906	1
|	Se	82	81.509	ug/L	2.575	3	-17	12759	3
|	Se	78	80.964	ug/L	2.111	2	6620	36931	1
[	Mo	98	24.452	ug/L	0.364	1	298	140603	1
	Y	89		ug/L			246203	253308	0
	Kr	83		ug/L			174	168	1
[>	In	115		ug/L			260797	264454	1
|	Ag	107	24.476	ug/L	0.123	0	39	222018	1
|	Cd	111	24.118	ug/L	0.347	1	144	55479	2
|	Cd	114	24.165	ug/L	0.512	2	18	126214	3
|	Sb	121	24.076	ug/L	0.464	1	136	211742	2
|	Sb	123	24.263	ug/L	0.434	1	117	163988	3
|	Ba	135	25.500	ug/L	0.354	1	25	48629	2
[	Ba	137	25.382	ug/L	0.296	1	52	84894	2
[>	Tb	159		ug/L			324505	333617	0
|	Tl	205	26.062	ug/L	0.609	2	40	592669	3
|	Pb	208	26.102	ug/L	0.325	1	384	813575	1
|	Bi	209		ug/L			267172	278522	0
|	Th	232	25.628	ug/L	0.240	0	145	940779	1
[	U	238	24.856	ug/L	0.208	0	41	1014134	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 13:45:59
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	246744	2
[	Be	9	23.876	ug/L	1.045	4	7	8264	2
	C	13		mg/L			3587	4213	2
	Cl	37		mg/L			2863468	3000212	0
[>	Sc	45		ug/L			195484	200855	0
[	V	51	24.749	ug/L	0.392	1	1040	225191	1
[	V-1	51	24.870	ug/L	0.300	1	3029	232210	0
[	Cr	52	24.677	ug/L	0.262	1	3579	201986	0
[	Cr	53	25.054	ug/L	0.458	1	1040	25069	1
[	Mn	55	25.336	ug/L	0.708	2	730	331034	2
[	Co	59	25.120	ug/L	0.543	2	99	249296	1
[>	Ge	72		ug/L			272490	266486	1
[	Ni	60	25.838	ug/L	0.492	1	85	53423	1
[	Ni	62	26.309	ug/L	0.718	2	50	8213	1
[	Cu	63	26.765	ug/L	0.504	1	308	128163	0
[	Cu	65	26.703	ug/L	0.559	2	120	60362	1
[	Zn	66	82.378	ug/L	2.201	2	338	122846	1
[	Zn	67	75.695	ug/L	1.956	2	126	19118	1
[	Zn	68	80.910	ug/L	1.747	2	5436	90015	0
[	As	75	26.777	ug/L	0.764	2	318	44615	1
[	As-1	75	25.749	ug/L	0.731	2	6563	48403	1
[	Se	82	81.818	ug/L	2.340	2	-17	12316	1
[	Se	78	80.798	ug/L	2.344	2	6620	35459	1
[	Mo	98	24.657	ug/L	0.858	3	298	136334	2
	Y	89		ug/L			246203	247604	0
	Kr	83		ug/L			174	159	3
[>	In	115		ug/L			260797	257247	1
[	Ag	107	24.425	ug/L	0.607	2	39	215458	1
[	Cd	111	23.991	ug/L	0.311	1	144	53670	0
[	Cd	114	24.095	ug/L	0.429	1	18	122382	1
[	Sb	121	23.754	ug/L	0.402	1	136	203172	0
[	Sb	123	23.856	ug/L	0.750	3	117	156762	1
[	Ba	135	25.646	ug/L	0.640	2	25	47560	1
[	Ba	137	25.164	ug/L	0.935	3	52	81828	2
[>	Tb	159		ug/L			324505	328945	1
[	Tl	205	25.760	ug/L	0.723	2	40	577470	2
[	Pb	208	25.895	ug/L	0.415	1	384	795695	0
[	Bi	209		ug/L			267172	271772	2
[	Th	232	25.125	ug/L	0.880	3	145	909130	2
[	U	238	24.328	ug/L	0.737	3	41	978514	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB3SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 13:52:18
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	242816	1
[	Be	9	23.836	ug/L	0.452	1	7	8123	1
	C	13		mg/L			3587	3879	1
	Cl	37		mg/L			2863468	3012351	0
[>	Sc	45		ug/L			195484	195912	0
[	V	51	25.436	ug/L	0.533	2	1040	225726	2
[	V-1	51	25.503	ug/L	0.553	2	3029	232195	2
[	Cr	52	24.902	ug/L	0.353	1	3579	198783	1
[	Cr	53	25.139	ug/L	0.396	1	1040	24531	1
[	Mn	55	24.875	ug/L	0.614	2	730	317033	2
[	Co	59	25.143	ug/L	0.292	1	99	243387	0
[>	Ge	72		ug/L			272490	270012	0
[	Ni	60	25.426	ug/L	0.176	0	85	53275	1
[	Ni	62	24.996	ug/L	0.170	0	50	7911	1
[	Cu	63	26.173	ug/L	0.381	1	308	127021	1
[	Cu	65	26.365	ug/L	0.037	0	120	60395	0
[	Zn	66	81.354	ug/L	0.428	0	338	122953	0
[	Zn	67	75.434	ug/L	1.244	1	126	19309	2
[	Zn	68	79.642	ug/L	1.645	2	5436	89871	1
[	As	75	26.405	ug/L	0.699	2	318	44588	1
[	As-1	75	25.488	ug/L	0.704	2	6563	48616	1
[	Se	82	80.747	ug/L	1.194	1	-17	12318	0
[	Se	78	80.303	ug/L	1.072	1	6620	35753	0
[	Mo	98	23.560	ug/L	0.356	1	298	132048	1
	Y	89		ug/L			246203	246410	0
	Kr	83		ug/L			174	179	5
[>	In	115		ug/L			260797	256845	1
[	Ag	107	25.116	ug/L	0.063	0	39	221262	1
[	Cd	111	23.910	ug/L	0.347	1	144	53413	2
[	Cd	114	23.987	ug/L	0.320	1	18	121656	1
[	Sb	121	23.625	ug/L	0.373	1	136	201789	2
[	Sb	123	23.844	ug/L	0.308	1	117	156480	1
[	Ba	135	25.559	ug/L	0.460	1	25	47329	0
[	Ba	137	25.045	ug/L	0.485	1	52	81335	0
[>	Tb	159		ug/L			324505	327722	2
[	Tl	205	25.626	ug/L	0.571	2	40	572226	0
[	Pb	208	25.582	ug/L	0.434	1	384	783069	0
[	Bi	209		ug/L			267172	269756	0
[	Th	232	25.155	ug/L	0.695	2	145	906736	0
[	U	238	24.335	ug/L	0.823	3	41	974917	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 Q REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 13:58:36
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	266340	5
[	Be	9	0.017	ug/L	0.007	44	7	15	14
	C	13		mg/L			3587	4004	1
	Cl	37		mg/L			2863468	2872824	1
[>	Sc	45		ug/L			195484	262051	4
[	V	51	0.633	ug/L	0.019	2	1040	8869	3
[	V-1	51	0.550	ug/L	0.026	4	3029	10667	2
[	Cr	52	0.081	ug/L	0.013	16	3579	5639	3
[	Cr	53	-0.145	ug/L	0.037	25	1040	1212	1
[	Mn	55	91.841	ug/L	2.081	2	730	1561981	2
[	Co	59	1.433	ug/L	0.016	1	99	18671	3
[>	Ge	72		ug/L			272490	290231	4
[	Ni	60	7.910	ug/L	0.278	3	85	17878	5
[	Ni	62	7.153	ug/L	0.078	1	50	2472	4
[	Cu	63	3.522	ug/L	0.099	2	308	18641	1
[	Cu	65	4.023	ug/L	0.118	2	120	10011	4
[	Zn	66	953.604	ug/L	9.924	1	338	1545103	4
[	Zn	67	843.930	ug/L	7.648	0	126	230772	3
[	Zn	68	925.058	ug/L	2.079	0	5436	1060581	4
[	As	75	0.438	ug/L	0.028	6	318	1128	2
[	As-1	75	0.172	ug/L	0.180	104	6563	7286	0
[	Se	82	0.614	ug/L	0.068	11	-17	81	13
[	Se	78	-0.742	ug/L	0.770	103	6620	6752	0
[	Mo	98	0.882	ug/L	0.012	1	298	5614	3
	Y	89		ug/L			246203	276117	3
	Kr	83		ug/L			174	160	1
[>	In	115		ug/L			260797	275406	3
[	Ag	107	0.007	ug/L	0.003	46	39	108	25
[	Cd	111	4.052	ug/L	0.062	1	144	9833	3
[	Cd	114	4.074	ug/L	0.036	0	18	22170	3
[	Sb	121	0.051	ug/L	0.006	11	136	611	6
[	Sb	123	0.049	ug/L	0.006	12	117	465	6
[	Ba	135	38.347	ug/L	0.589	1	25	76128	3
[	Ba	137	37.932	ug/L	0.774	2	52	132044	2
[>	Tb	159		ug/L			324505	357034	3
[	Tl	205	0.029	ug/L	0.004	15	40	758	11
[	Pb	208	0.019	ug/L	0.007	39	384	1038	20
[	Bi	209		ug/L			267172	294063	4
[	Th	232	0.127	ug/L	0.063	49	145	5103	46
[	U	238	0.090	ug/L	0.003	2	41	3971	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS55 A REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, November 29, 2012 14:04:54
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	256172	3
[	Be	9	0.005	ug/L	0.003	49	7	10	6
	C	13		mg/L			3587	101492	2
	Cl	37		mg/L			2863468	2976714	1
[>	Sc	45		ug/L			195484	204450	2
[	V	51	0.501	ug/L	0.035	7	1040	5699	4
[	V-1	51	-0.015	ug/L	0.015	96	3029	3023	1
[	Cr	52	1.909	ug/L	0.100	5	3579	19343	2
[	Cr	53	0.249	ug/L	0.060	24	1040	1330	2
[	Mn	55	11.155	ug/L	0.614	5	730	148654	3
[	Co	59	0.025	ug/L	0.003	10	99	355	5
[>	Ge	72		ug/L			272490	280916	2
[	Ni	60	0.336	ug/L	0.024	7	85	818	3
[	Ni	62	0.358	ug/L	0.053	14	50	169	10
[	Cu	63	21.057	ug/L	1.291	6	308	106252	3
[	Cu	65	21.032	ug/L	1.415	6	120	50083	3
[	Zn	66	7.502	ug/L	0.319	4	338	12102	1
[	Zn	67	6.581	ug/L	0.526	7	126	1869	4
[	Zn	68	6.984	ug/L	0.523	7	5436	13302	1
[	As	75	0.004	ug/L	0.023	617	318	334	9
[	As-1	75	-0.082	ug/L	0.116	141	6563	6621	0
[	Se	82	0.208	ug/L	0.087	41	-17	14	92
[	Se	78	-0.245	ug/L	0.513	209	6620	6728	0
[	Mo	98	0.442	ug/L	0.031	6	298	2878	4
	Y	89		ug/L			246203	255730	2
	Kr	83		ug/L			174	168	3
[>	In	115		ug/L			260797	263763	2
[	Ag	107	0.012	ug/L	0.002	15	39	146	8
[	Cd	111	0.045	ug/L	0.003	7	144	248	5
[	Cd	114	0.038	ug/L	0.007	18	18	216	14
[	Sb	121	0.004	ug/L	0.001	22	136	171	5
[	Sb	123	0.003	ug/L	0.002	59	117	139	10
[	Ba	135	0.681	ug/L	0.042	6	25	1319	3
[	Ba	137	0.669	ug/L	0.022	3	52	2284	4
[>	Tb	159		ug/L			324505	344568	3
[	Tl	205	0.002	ug/L	0.000	8	40	88	6
[	Pb	208	0.192	ug/L	0.009	4	384	6576	1
[	Bi	209		ug/L			267172	280112	2
[	Th	232	0.018	ug/L	0.008	46	145	831	34
[	U	238	0.004	ug/L	0.001	16	41	196	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS64 A REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, November 29, 2012 14:11:12
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	253831	1
[	Be	9	-0.000	ug/L	0.005	1554	7	8	22
	C	13		mg/L			3587	3480	5
	Cl	37		mg/L			2863468	3050035	0
[>	Sc	45		ug/L			195484	210035	1
|	V	51	0.525	ug/L	0.028	5	1040	6091	5
|	V-1	51	0.489	ug/L	0.015	3	3029	7967	3
|	Cr	52	0.137	ug/L	0.011	8	3579	4995	2
|	Cr	53	0.046	ug/L	0.029	63	1040	1164	1
|	Mn	55	216.525	ug/L	1.861	0	730	2952832	2
[	Co	59	0.204	ug/L	0.008	3	99	2220	4
[>	Ge	72		ug/L			272490	281743	1
|	Ni	60	0.196	ug/L	0.004	2	85	515	2
|	Ni	62	0.164	ug/L	0.081	49	50	105	24
|	Cu	63	0.040	ug/L	0.005	13	308	519	6
|	Cu	65	0.048	ug/L	0.008	16	120	238	8
|	Zn	66	0.353	ug/L	0.014	4	338	904	3
|	Zn	67	0.557	ug/L	0.110	19	126	278	9
|	Zn	68	0.100	ug/L	0.065	64	5436	5731	0
|	As	75	129.262	ug/L	0.417	0	318	226501	1
|	As-1	75	130.983	ug/L	0.379	0	6563	232637	1
|	Se	82	0.150	ug/L	0.101	67	-17	5	289
|	Se	78	-0.757	ug/L	0.188	24	6620	6557	0
[	Mo	98	0.034	ug/L	0.005	15	298	504	6
	Y	89		ug/L			246203	259543	1
	Kr	83		ug/L			174	169	1
[>	In	115		ug/L			260797	266947	2
|	Ag	107	0.003	ug/L	0.002	56	39	66	24
|	Cd	111	0.005	ug/L	0.004	70	144	159	5
|	Cd	114	-0.002	ug/L	0.000	20	18	8	26
|	Sb	121	0.025	ug/L	0.003	11	136	357	8
|	Sb	123	0.022	ug/L	0.000	0	117	270	1
|	Ba	135	8.056	ug/L	0.038	0	25	15524	1
[	Ba	137	8.046	ug/L	0.220	2	52	27188	0
[>	Tb	159		ug/L			324505	342038	2
|	Tl	205	0.002	ug/L	0.000	18	40	85	11
|	Pb	208	0.012	ug/L	0.000	3	384	803	3
|	Bi	209		ug/L			267172	287286	2
|	Th	232	0.003	ug/L	0.000	3	145	254	1
[	U	238	0.001	ug/L	0.000	55	41	66	18

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 14:17:30
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	238241	1
[	Be	9	0.139	ug/L	0.018	12	7	54	12
	C	13		mg/L			3587	5360	1
	Cl	37		mg/L			2863468	3011664	0
[>	Sc	45		ug/L			195484	250942	2
[	V	51	14.237	ug/L	0.336	2	1040	162348	0
[	V-1	51	14.490	ug/L	0.295	2	3029	170603	1
[	Cr	52	29.867	ug/L	0.339	1	3579	304409	1
[	Cr	53	29.833	ug/L	0.587	1	1040	37038	3
[	Mn	55	612.600	ug/L	13.662	2	730	9974936	1
[	Co	59	4.249	ug/L	0.060	1	99	52782	1
[>	Ge	72		ug/L			272490	279802	1
[	Ni	60	25.203	ug/L	0.079	0	85	54724	1
[	Ni	62	28.525	ug/L	0.719	2	50	9348	2
[	Cu	63	121.829	ug/L	1.817	1	308	611609	2
[	Cu	65	123.237	ug/L	2.101	1	120	292113	2
[	Zn	66	1833.940	ug/L	17.714	0	338	2864821	1
[	Zn	67	1602.581	ug/L	10.224	0	126	422485	2
[	Zn	68	1758.456	ug/L	11.536	0	5436	1938679	1
[	As	75	5.457	ug/L	0.041	0	318	9808	1
[	As-1	75	5.282	ug/L	0.098	1	6563	15784	1
[	Se	82	1.052	ug/L	0.052	4	-17	148	4
[	Se	78	0.002	ug/L	0.286	11775	6620	6798	0
[	Mo	98	24.380	ug/L	0.348	1	298	141588	2
	Y	89		ug/L			246203	317921	1
	Kr	83		ug/L			174	184	1
[>	In	115		ug/L			260797	252531	1
[	Ag	107	0.454	ug/L	0.015	3	39	3971	2
[	Cd	111	5.300	ug/L	0.167	3	144	11745	1
[	Cd	114	4.952	ug/L	0.094	1	18	24707	1
[	Sb	121	6.934	ug/L	0.101	1	136	58321	1
[	Sb	123	6.936	ug/L	0.038	0	117	44836	1
[	Ba	135	153.242	ug/L	2.338	1	25	278902	1
[	Ba	137	151.577	ug/L	1.077	0	52	483815	1
[>	Tb	159		ug/L			324505	333904	0
[	Tl	205	0.046	ug/L	0.002	4	40	1093	3
[	Pb	208	287.778	ug/L	6.702	2	384	8973515	2
[	Bi	209		ug/L			267172	277539	2
[	Th	232	0.613	ug/L	0.016	2	145	22655	2
[	U	238	0.193	ug/L	0.008	4	41	7943	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, November 29, 2012 14:23:48
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	261413	0
[	Be	9	49.577	ug/L	0.196	0	7	18183	0
	C	13		mg/L			3587	2239	2
	Cl	37		mg/L			2863468	3060188	0
[>	Sc	45		ug/L			195484	211952	1
[	V	51	49.706	ug/L	0.743	1	1040	476090	0
[	V-1	51	49.525	ug/L	0.667	1	3029	484664	0
[	Cr	52	50.148	ug/L	1.266	2	3579	429066	1
[	Cr	53	49.569	ug/L	1.204	2	1040	51226	1
[	Mn	55	49.846	ug/L	1.408	2	730	686391	1
[	Co	59	49.870	ug/L	1.351	2	99	522081	1
[>	Ge	72		ug/L			272490	290856	1
[	Ni	60	49.090	ug/L	0.071	0	85	110714	1
[	Ni	62	48.206	ug/L	1.035	2	50	16383	1
[	Cu	63	49.297	ug/L	0.614	1	308	257398	0
[	Cu	65	49.026	ug/L	0.499	1	120	120874	2
[	Zn	66	50.063	ug/L	0.709	1	338	81649	2
[	Zn	67	49.752	ug/L	0.084	0	126	13764	0
[	Zn	68	49.617	ug/L	0.568	1	5436	62504	1
[	As	75	49.751	ug/L	0.579	1	318	90202	1
[	As-1	75	49.458	ug/L	0.644	1	6563	95039	1
[	Se	82	50.237	ug/L	0.617	1	-17	8248	1
[	Se	78	48.898	ug/L	0.886	1	6620	26215	1
[	Mo	98	49.777	ug/L	0.333	0	298	300158	0
	Y	89		ug/L			246203	265086	1
	Kr	83		ug/L			174	176	5
[>	In	115		ug/L			260797	274881	1
[	Ag	107	49.606	ug/L	0.020	0	39	467669	1
[	Cd	111	49.389	ug/L	0.842	1	144	117914	1
[	Cd	114	49.503	ug/L	0.852	1	18	268661	1
[	Sb	121	48.921	ug/L	0.648	1	136	447024	0
[	Sb	123	49.050	ug/L	0.650	1	117	344382	0
[	Ba	135	49.760	ug/L	0.445	0	25	98609	1
[	Ba	137	49.814	ug/L	0.551	1	52	173112	1
[>	Tb	159		ug/L			324505	347560	0
[	Tl	205	50.725	ug/L	0.573	1	40	1201530	0
[	Pb	208	50.436	ug/L	0.216	0	384	1637255	0
[	Bi	209		ug/L			267172	289131	1
[	Th	232	51.139	ug/L	0.503	0	145	1955422	0
[	U	238	50.837	ug/L	0.583	1	41	2160794	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, November 29, 2012 14:30:26
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	259480	0
[	Be	9	-0.005	ug/L	0.007	132	7	6	39
	C	13		mg/L			3587	3114	2
	Cl	37		mg/L			2863468	3127715	0
[>	Sc	45		ug/L			195484	210977	1
|	V	51	-0.007	ug/L	0.013	192	1040	1060	12
|	V-1	51	-0.057	ug/L	0.010	16	3029	2712	2
|	Cr	52	-0.031	ug/L	0.009	28	3579	3598	2
|	Cr	53	-0.187	ug/L	0.045	24	1040	934	3
|	Mn	55	-0.011	ug/L	0.003	29	730	643	5
[	Co	59	-0.004	ug/L	0.001	34	99	67	22
[>	Ge	72		ug/L			272490	288049	1
|	Ni	60	-0.008	ug/L	0.007	87	85	72	19
|	Ni	62	-0.002	ug/L	0.031	1332	50	52	19
|	Cu	63	-0.018	ug/L	0.001	5	308	232	1
|	Cu	65	-0.007	ug/L	0.006	93	120	110	13
|	Zn	66	0.006	ug/L	0.014	238	338	367	7
|	Zn	67	-0.038	ug/L	0.067	175	126	123	13
|	Zn	68	-0.335	ug/L	0.116	34	5436	5367	1
|	As	75	-0.020	ug/L	0.008	40	318	302	5
|	As-1	75	-0.156	ug/L	0.043	27	6563	6663	0
|	Se	82	0.010	ug/L	0.072	726	-17	-16	68
|	Se	78	-0.735	ug/L	0.200	27	6620	6712	0
[	Mo	98	-0.042	ug/L	0.001	1	298	63	5
	Y	89		ug/L			246203	261615	1
	Kr	83		ug/L			174	164	4
[>	In	115		ug/L			260797	271953	1
|	Ag	107	0.000	ug/L	0.001	238	39	45	23
|	Cd	111	-0.003	ug/L	0.010	366	144	143	14
|	Cd	114	-0.001	ug/L	0.001	50	18	13	21
|	Sb	121	0.015	ug/L	0.008	54	136	272	24
|	Sb	123	0.011	ug/L	0.005	42	117	198	15
|	Ba	135	0.004	ug/L	0.002	44	25	34	8
[	Ba	137	-0.001	ug/L	0.004	352	52	51	22
[>	Tb	159		ug/L			324505	344028	0
|	Tl	205	0.003	ug/L	0.001	38	40	115	24
|	Pb	208	0.001	ug/L	0.000	26	384	427	1
|	Bi	209		ug/L			267172	288261	2
|	Th	232	0.012	ug/L	0.003	25	145	610	19
[	U	238	0.000	ug/L	0.000	45	41	56	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB4 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 14:38:00
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	260760	2
[	Be	9	0.014	ug/L	0.017	119	7	13	45
	C	13		mg/L			3587	3878	2
	Cl	37		mg/L			2863468	3094314	0
[>	Sc	45		ug/L			195484	210361	0
[	V	51	0.022	ug/L	0.019	83	1040	1329	12
[	V-1	51	-0.036	ug/L	0.006	15	3029	2914	2
[	Cr	52	0.032	ug/L	0.001	3	3579	4122	0
[	Cr	53	-0.147	ug/L	0.063	42	1040	972	6
[	Mn	55	0.030	ug/L	0.004	13	730	1196	4
[	Co	59	0.003	ug/L	0.001	32	99	136	7
[>	Ge	72		ug/L			272490	285527	2
[	Ni	60	0.016	ug/L	0.010	64	85	123	17
[	Ni	62	0.023	ug/L	0.015	65	50	60	9
[	Cu	63	0.803	ug/L	0.016	2	308	4431	0
[	Cu	65	0.802	ug/L	0.018	2	120	2065	0
[	Zn	66	0.938	ug/L	0.029	3	338	1849	1
[	Zn	67	0.892	ug/L	0.058	6	126	372	3
[	Zn	68	0.460	ug/L	0.217	47	5436	6208	2
[	As	75	-0.006	ug/L	0.017	291	318	323	8
[	As-1	75	-0.132	ug/L	0.128	96	6563	6644	1
[	Se	82	0.124	ug/L	0.055	44	-17	1	631
[	Se	78	-0.569	ug/L	0.603	105	6620	6714	1
[	Mo	98	-0.027	ug/L	0.001	4	298	152	3
	Y	89		ug/L			246203	259734	1
	Kr	83		ug/L			174	163	1
[>	In	115		ug/L			260797	273731	1
[	Ag	107	0.001	ug/L	0.001	45	39	54	10
[	Cd	111	0.006	ug/L	0.003	51	144	166	4
[	Cd	114	0.004	ug/L	0.000	9	18	39	3
[	Sb	121	-0.002	ug/L	0.002	92	136	123	15
[	Sb	123	-0.004	ug/L	0.002	40	117	93	12
[	Ba	135	0.051	ug/L	0.007	12	25	127	10
[	Ba	137	0.039	ug/L	0.002	4	52	188	2
[>	Tb	159		ug/L			324505	346435	1
[	Tl	205	0.006	ug/L	0.001	23	40	185	16
[	Pb	208	0.014	ug/L	0.002	13	384	865	6
[	Bi	209		ug/L			267172	288322	1
[	Th	232	0.012	ug/L	0.002	16	145	612	11
[	U	238	0.003	ug/L	0.000	14	41	189	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB4SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 14:44:18
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	255107	1
[	Be	9	24.092	ug/L	0.657	2	7	8624	1
	C	13		mg/L			3587	4109	2
	Cl	37		mg/L			2863468	3106262	0
[>	Sc	45		ug/L			195484	207836	1
[	V	51	24.686	ug/L	0.158	0	1040	232428	0
[	V-1	51	24.478	ug/L	0.297	1	3029	236534	0
[	Cr	52	24.919	ug/L	0.529	2	3579	210993	1
[	Cr	53	24.267	ug/L	0.688	2	1040	25155	1
[	Mn	55	24.818	ug/L	0.212	0	730	335562	0
[	Co	59	24.763	ug/L	0.299	1	99	254292	0
[>	Ge	72		ug/L			272490	285258	0
[	Ni	60	24.880	ug/L	0.401	1	85	55073	1
[	Ni	62	24.631	ug/L	0.510	2	50	8236	1
[	Cu	63	26.289	ug/L	0.437	1	308	134775	1
[	Cu	65	26.723	ug/L	0.440	1	120	64665	0
[	Zn	66	79.242	ug/L	0.526	0	338	126531	0
[	Zn	67	72.480	ug/L	0.532	0	126	19605	0
[	Zn	68	77.364	ug/L	1.844	2	5436	92391	1
[	As	75	25.569	ug/L	0.366	1	318	45626	0
[	As-1	75	24.585	ug/L	0.619	2	6563	49786	1
[	Se	82	78.501	ug/L	0.660	0	-17	12651	0
[	Se	78	77.565	ug/L	1.676	2	6620	36719	1
[	Mo	98	23.373	ug/L	0.392	1	298	138387	1
	Y	89		ug/L			246203	263834	0
	Kr	83		ug/L			174	174	3
[>	In	115		ug/L			260797	271680	1
[	Ag	107	23.652	ug/L	0.379	1	39	220375	0
[	Cd	111	23.173	ug/L	0.454	1	144	54756	1
[	Cd	114	23.324	ug/L	0.394	1	18	125117	1
[	Sb	121	23.369	ug/L	0.595	2	136	211099	1
[	Sb	123	23.411	ug/L	0.640	2	117	162502	1
[	Ba	135	24.633	ug/L	0.568	2	25	48251	1
[	Ba	137	24.491	ug/L	0.425	1	52	84137	0
[>	Tb	159		ug/L			324505	342508	0
[	Tl	205	25.025	ug/L	0.412	1	40	584147	1
[	Pb	208	25.178	ug/L	0.616	2	384	805558	1
[	Bi	209		ug/L			267172	287833	0
[	Th	232	24.664	ug/L	0.535	2	145	929422	1
[	U	238	23.725	ug/L	0.315	1	41	993745	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 ADUP REN
Sample Dil Factor: 10 del
Comments:
Sample Date/Time: Thursday, November 29, 2012 14:50:35
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	265839	4
[	Be	9	0.021	ug/L	0.004	20	7	16	11
	C	13		mg/L			3587	4019	2
	Cl	37		mg/L			2863468	3863180	2
[>	Sc	45		ug/L			195484	245066	5
|	V	51	26.924	ug/L	1.162	4	1040	298356	1
|	V-1	51	26.686	ug/L	1.089	4	3029	303310	1
|	Cr	52	2.978	ug/L	0.120	4	3579	33645	1
|	Cr	53	3.491	ug/L	0.121	3	1040	5386	6
|	Mn	55	120.525	ug/L	3.201	2	730	1916244	2
[	Co	59	0.101	ug/L	0.001	0	99	1341	6
[>	Ge	72		ug/L			272490	304997	4
|	Ni	60	0.404	ug/L	0.024	5	85	1049	3
|	Ni	62	0.730	ug/L	0.077	10	50	315	6
|	Cu	63	1.666	ug/L	0.037	2	308	9456	5
|	Cu	65	1.315	ug/L	0.030	2	120	3529	3
|	Zn	66	0.644	ug/L	0.062	9	338	1473	3
|	Zn	67	3.110	ug/L	0.119	3	126	1035	6
|	Zn	68	0.041	ug/L	0.200	487	5436	6128	2
|	As	75	0.290	ug/L	0.023	8	318	906	4
|	As-1	75	-0.094	ug/L	0.135	143	6563	7163	0
|	Se	82	0.388	ug/L	0.040	10	-17	47	14
|	Se	78	-1.527	ug/L	0.641	41	6620	6775	0
[	Mo	98	0.150	ug/L	0.007	4	298	1278	1
	Y	89		ug/L			246203	312532	3
	Kr	83		ug/L			174	165	4
[>	In	115		ug/L			260797	287331	4
|	Ag	107	0.015	ug/L	0.001	9	39	188	2
|	Cd	111	0.011	ug/L	0.015	140	144	185	21
|	Cd	114	0.005	ug/L	0.002	31	18	49	18
|	Sb	121	0.025	ug/L	0.001	3	136	389	4
|	Sb	123	0.022	ug/L	0.001	4	117	287	6
|	Ba	135	3.598	ug/L	0.146	4	25	7471	0
[	Ba	137	3.532	ug/L	0.139	3	52	12876	3
[>	Tb	159		ug/L			324505	368204	4
|	Tl	205	0.005	ug/L	0.001	21	40	173	11
|	Pb	208	0.306	ug/L	0.011	3	384	10937	2
|	Bi	209		ug/L			267172	294207	4
|	Th	232	0.090	ug/L	0.007	7	145	3784	3
[	U	238	0.029	ug/L	0.001	4	41	1346	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 A REN
Sample Dil Factor: 10
Comments: Dil
Sample Date/Time: Thursday, November 29, 2012 14:56:51
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	285834	6
[	Be	9	0.017	ug/L	0.019	108	7	16	48
	C	13		mg/L			3587	4062	3
	Cl	37		mg/L			2863468	4021492	2
[>	Sc	45		ug/L			195484	269714	6
[	V	51	27.243	ug/L	0.840	3	1040	332341	4
[	V-1	51	27.006	ug/L	0.869	3	3029	337850	4
[	Cr	52	2.927	ug/L	0.061	2	3579	36505	5
[	Cr	53	3.463	ug/L	0.250	7	1040	5886	7
[	Mn	55	121.275	ug/L	2.672	2	730	2123469	6
[	Co	59	0.113	ug/L	0.008	7	99	1636	10
[>	Ge	72		ug/L			272490	326834	5
[	Ni	60	0.420	ug/L	0.017	4	85	1164	4
[	Ni	62	0.822	ug/L	0.030	3	50	373	7
[	Cu	63	1.664	ug/L	0.047	2	308	10130	7
[	Cu	65	1.290	ug/L	0.040	3	120	3714	6
[	Zn	66	0.700	ug/L	0.028	4	338	1681	5
[	Zn	67	3.525	ug/L	0.163	4	126	1238	9
[	Zn	68	-0.135	ug/L	0.103	75	5436	6343	3
[	As	75	0.274	ug/L	0.025	9	318	936	2
[	As-1	75	-0.314	ug/L	0.151	48	6563	7234	1
[	Se	82	0.357	ug/L	0.042	11	-17	45	22
[	Se	78	-2.508	ug/L	0.656	26	6620	6826	1
[	Mo	98	0.141	ug/L	0.009	6	298	1313	7
	Y	89		ug/L			246203	335121	6
	Kr	83		ug/L			174	172	5
[>	In	115		ug/L			260797	308315	5
[	Ag	107	0.013	ug/L	0.001	5	39	187	5
[	Cd	111	0.014	ug/L	0.021	149	144	210	31
[	Cd	114	0.003	ug/L	0.002	67	18	41	30
[	Sb	121	0.026	ug/L	0.004	17	136	422	9
[	Sb	123	0.022	ug/L	0.004	16	117	310	10
[	Ba	135	3.589	ug/L	0.136	3	25	7996	3
[	Ba	137	3.565	ug/L	0.210	5	52	13933	5
[>	Tb	159		ug/L			324505	390276	6
[	Tl	205	0.003	ug/L	0.001	27	40	120	10
[	Pb	208	0.314	ug/L	0.004	1	384	11898	4
[	Bi	209		ug/L			267172	318009	5
[	Th	232	0.074	ug/L	0.001	1	145	3365	5
[	U	238	0.028	ug/L	0.001	3	41	1376	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 ASPK REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, November 29, 2012 15:03:08
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	296175	4
[	Be	9	5.030	ug/L	0.150	2	7	2098	4
	C	13		mg/L			3587	4157	4
	Cl	37		mg/L			2863468	4091250	1
[>	Sc	45		ug/L			195484	277439	4
[	V	51	31.737	ug/L	0.943	2	1040	398391	4
[	V-1	51	31.476	ug/L	0.899	2	3029	404735	4
[	Cr	52	7.497	ug/L	0.190	2	3579	88291	4
[	Cr	53	7.957	ug/L	0.103	1	1040	12005	4
[	Mn	55	125.987	ug/L	2.090	1	730	2269835	4
[	Co	59	4.564	ug/L	0.053	1	99	62675	3
[>	Ge	72		ug/L			272490	336811	3
[	Ni	60	5.436	ug/L	0.041	0	85	14293	4
[	Ni	62	5.698	ug/L	0.175	3	50	2298	6
[	Cu	63	6.595	ug/L	0.038	0	308	40213	4
[	Cu	65	6.348	ug/L	0.111	1	120	18256	5
[	Zn	66	16.729	ug/L	0.185	1	338	31878	4
[	Zn	67	17.968	ug/L	0.375	2	126	5855	4
[	Zn	68	15.424	ug/L	0.293	1	5436	27136	4
[	As	75	5.568	ug/L	0.036	0	318	12041	4
[	As-1	75	4.671	ug/L	0.061	1	6563	17739	3
[	Se	82	17.036	ug/L	0.096	0	-17	3224	3
[	Se	78	13.514	ug/L	0.372	2	6620	14307	2
[	Mo	98	4.849	ug/L	0.142	2	298	34200	5
	Y	89		ug/L			246203	348006	4
	Kr	83		ug/L			174	174	4
[>	In	115		ug/L			260797	315186	2
[	Ag	107	4.932	ug/L	0.119	2	39	53373	4
[	Cd	111	4.921	ug/L	0.136	2	144	13636	5
[	Cd	114	4.912	ug/L	0.078	1	18	30599	3
[	Sb	121	4.537	ug/L	0.078	1	136	47701	3
[	Sb	123	4.530	ug/L	0.096	2	117	36614	4
[	Ba	135	8.571	ug/L	0.134	1	25	19504	3
[	Ba	137	8.458	ug/L	0.135	1	52	33763	3
[>	Tb	159		ug/L			324505	405258	5
[	Tl	205	4.947	ug/L	0.117	2	40	136674	5
[	Pb	208	5.319	ug/L	0.083	1	384	201781	6
[	Bi	209		ug/L			267172	329485	5
[	Th	232	4.881	ug/L	0.096	1	145	217688	4
[	U	238	4.843	ug/L	0.112	2	41	240070	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 B REN
Sample Dil Factor: 10 Dil
Comments:
Sample Date/Time: Thursday, November 29, 2012 15:09:25
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	247099	3
[	Be	9	0.022	ug/L	0.008	35	7	15	19
	C	13		mg/L			3587	3769	3
	Cl	37		mg/L			2863468	4130504	2
[>	Sc	45		ug/L			195484	236892	5
[	V	51	10.774	ug/L	0.211	1	1040	116323	5
[	V-1	51	10.944	ug/L	0.172	1	3029	122565	5
[	Cr	52	2.313	ug/L	0.068	2	3579	26256	4
[	Cr	53	3.277	ug/L	0.048	1	1040	4963	5
[	Mn	55	291.722	ug/L	3.825	1	730	4486288	5
[	Co	59	0.156	ug/L	0.004	2	99	1945	6
[>	Ge	72		ug/L			272490	290592	3
[	Ni	60	0.480	ug/L	0.000	0	85	1171	3
[	Ni	62	0.742	ug/L	0.069	9	50	305	11
[	Cu	63	1.243	ug/L	0.044	3	308	6809	6
[	Cu	65	0.777	ug/L	0.022	2	120	2040	3
[	Zn	66	0.779	ug/L	0.028	3	338	1625	6
[	Zn	67	1.977	ug/L	0.041	2	126	676	5
[	Zn	68	0.526	ug/L	0.201	38	5436	6395	3
[	As	75	0.354	ug/L	0.033	9	318	979	8
[	As-1	75	0.055	ug/L	0.116	211	6563	7091	0
[	Se	82	0.616	ug/L	0.062	10	-17	82	15
[	Se	78	-0.820	ug/L	0.574	70	6620	6733	0
[	Mo	98	0.087	ug/L	0.007	8	298	839	8
	Y	89		ug/L			246203	286819	4
	Kr	83		ug/L			174	170	2
[>	In	115		ug/L			260797	280719	4
[	Ag	107	0.007	ug/L	0.001	19	39	114	16
[	Cd	111	-0.008	ug/L	0.024	309	144	137	45
[	Cd	114	0.001	ug/L	0.000	45	18	25	5
[	Sb	121	0.014	ug/L	0.003	18	136	272	4
[	Sb	123	0.011	ug/L	0.000	4	117	206	3
[	Ba	135	7.003	ug/L	0.118	1	25	14188	3
[	Ba	137	6.912	ug/L	0.072	1	52	24575	4
[>	Tb	159		ug/L			324505	348027	3
[	Tl	205	0.005	ug/L	0.000	8	40	162	2
[	Pb	208	0.087	ug/L	0.001	0	384	3253	2
[	Bi	209		ug/L			267172	277033	2
[	Th	232	0.048	ug/L	0.004	8	145	1972	4
[	U	238	0.014	ug/L	0.001	6	41	622	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 C REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, November 29, 2012 15:15:44
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens RSD
[>	Li	6		ug/L			238098	250089	1
[	Be	9	0.006	ug/L	0.008	126	7	10	24
	C	13		mg/L			3587	3657	2
	Cl	37		mg/L			2863468	3376713	0
[>	Sc	45		ug/L			195484	232471	2
[	V	51	2.268	ug/L	0.005	0	1040	25008	2
[	V-1	51	2.364	ug/L	0.028	1	3029	28800	2
[	Cr	52	1.011	ug/L	0.022	2	3579	13658	1
[	Cr	53	1.371	ug/L	0.100	7	1040	2756	3
[	Mn	55	780.120	ug/L	8.114	1	730	11772197	2
[	Co	59	0.456	ug/L	0.015	3	99	5357	4
[>	Ge	72		ug/L			272490	292265	1
[	Ni	60	1.594	ug/L	0.015	0	85	3700	1
[	Ni	62	1.726	ug/L	0.078	4	50	641	5
[	Cu	63	0.838	ug/L	0.019	2	308	4720	3
[	Cu	65	0.697	ug/L	0.032	4	120	1853	2
[	Zn	66	2.543	ug/L	0.034	1	338	4511	1
[	Zn	67	2.706	ug/L	0.086	3	126	880	3
[	Zn	68	2.288	ug/L	0.139	6	5436	8456	0
[	As	75	1.417	ug/L	0.046	3	318	2913	1
[	As-1	75	1.005	ug/L	0.120	11	6563	8835	0
[	Se	82	0.945	ug/L	0.006	0	-17	137	2
[	Se	78	-1.047	ug/L	0.311	29	6620	6687	0
[	Mo	98	0.056	ug/L	0.009	15	298	657	6
	Y	89		ug/L			246203	282712	2
	Kr	83		ug/L			174	172	6
[>	In	115		ug/L			260797	283159	1
[	Ag	107	0.004	ug/L	0.003	84	39	76	36
[	Cd	111	0.023	ug/L	0.011	50	144	212	12
[	Cd	114	0.007	ug/L	0.002	27	18	60	17
[	Sb	121	0.094	ug/L	0.002	2	136	1027	0
[	Sb	123	0.089	ug/L	0.001	1	117	773	0
[	Ba	135	11.065	ug/L	0.566	5	25	22601	4
[	Ba	137	10.932	ug/L	0.393	3	52	39166	2
[>	Tb	159		ug/L			324505	348463	1
[	Tl	205	0.005	ug/L	0.000	8	40	160	4
[	Pb	208	2.854	ug/L	0.072	2	384	93240	1
[	Bi	209		ug/L			267172	279430	2
[	Th	232	0.032	ug/L	0.001	3	145	1368	2
[	U	238	0.009	ug/L	0.002	20	41	441	19

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 D REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, November 29, 2012 15:22:03
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			238098	227357	12
	Be	9	0.004	ug/L	0.006	137	7	8	14
	C	13		mg/L			3587	3867	7
	Cl	37		mg/L			2863468	7748632	8
>	Sc	45		ug/L			195484	240688	13
	V	51	3.049	ug/L	0.149	4	1040	34224	9
	V-1	51	4.564	ug/L	0.058	1	3029	54164	14
	Cr	52	0.640	ug/L	0.035	5	3579	10538	11
	Cr	53	5.425	ug/L	0.598	11	1040	7567	22
	Mn	55	76.087	ug/L	2.483	3	730	1185985	11
	Co	59	0.053	ug/L	0.002	3	99	757	15
>	Ge	72		ug/L			272490	290499	11
	Ni	60	0.762	ug/L	0.054	7	85	1814	17
	Ni	62	1.070	ug/L	0.106	9	50	418	19
	Cu	63	1.868	ug/L	0.085	4	308	10067	13
	Cu	65	0.185	ug/L	0.016	8	120	581	7
	Zn	66	0.936	ug/L	0.020	2	338	1879	12
	Zn	67	1.744	ug/L	0.133	7	126	614	16
	Zn	68	0.777	ug/L	0.543	69	5436	6633	2
	As	75	0.636	ug/L	0.025	3	318	1487	12
	As-1	75	-0.061	ug/L	0.452	740	6563	6826	0
	Se	82	2.570	ug/L	0.333	12	-17	407	24
	Se	78	-0.427	ug/L	1.884	441	6620	6833	1
	Mo	98	0.025	ug/L	0.005	20	298	463	9
	Y	89		ug/L			246203	287418	12
	Kr	83		ug/L			174	188	0
>	In	115		ug/L			260797	301722	12
	Ag	107	0.003	ug/L	0.001	16	39	78	6
	Cd	111	-0.117	ug/L	0.035	30	144	-146	69
	Cd	114	0.001	ug/L	0.000	29	18	30	13
	Sb	121	0.040	ug/L	0.004	9	136	553	6
	Sb	123	0.037	ug/L	0.004	10	117	421	10
	Ba	135	9.414	ug/L	0.083	0	25	20510	13
	Ba	137	9.214	ug/L	0.075	0	52	35185	12
>	Tb	159		ug/L			324505	357521	12
	Tl	205	0.002	ug/L	0.000	16	40	95	19
	Pb	208	0.122	ug/L	0.001	0	384	4489	12
	Bi	209		ug/L			267172	266683	13
	Th	232	0.004	ug/L	0.001	29	145	299	2
	U	238	0.013	ug/L	0.000	3	41	595	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 H REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, November 29, 2012 15:28:22
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	219276	1
[	Be	9	-0.003	ug/L	0.015	453	7	6	69
	C	13		mg/L			3587	3388	2
	Cl	37		mg/L			2863468	3672489	0
[>	Sc	45		ug/L			195484	246195	0
[	V	51	1.594	ug/L	0.027	1	1040	19006	1
[	V-1	51	2.015	ug/L	0.037	1	3029	26569	2
[	Cr	52	0.306	ug/L	0.014	4	3579	7525	2
[	Cr	53	1.668	ug/L	0.135	8	1040	3269	5
[	Mn	55	719.084	ug/L	10.621	1	730	11492600	2
[	Co	59	0.332	ug/L	0.012	3	99	4164	4
[>	Ge	72		ug/L			272490	298940	1
[	Ni	60	1.391	ug/L	0.036	2	85	3315	2
[	Ni	62	1.390	ug/L	0.043	3	50	539	2
[	Cu	63	0.264	ug/L	0.008	2	308	1755	1
[	Cu	65	0.095	ug/L	0.007	7	120	372	6
[	Zn	66	0.626	ug/L	0.021	3	338	1415	4
[	Zn	67	1.348	ug/L	0.050	3	126	518	1
[	Zn	68	0.372	ug/L	0.037	9	5436	6401	1
[	As	75	1.502	ug/L	0.009	0	318	3138	0
[	As-1	75	0.963	ug/L	0.052	5	6563	8961	0
[	Se	82	1.124	ug/L	0.170	15	-17	170	15
[	Se	78	-1.518	ug/L	0.348	22	6620	6650	0
[	Mo	98	0.016	ug/L	0.005	30	298	426	6
	Y	89		ug/L			246203	290541	1
	Kr	83		ug/L			174	164	3
[>	In	115		ug/L			260797	322631	1
[	Ag	107	0.001	ug/L	0.000	41	39	61	8
[	Cd	111	0.004	ug/L	0.006	163	144	189	10
[	Cd	114	-0.001	ug/L	0.001	117	18	18	27
[	Sb	121	0.021	ug/L	0.002	8	136	390	5
[	Sb	123	0.019	ug/L	0.005	29	117	298	15
[	Ba	135	8.779	ug/L	0.179	2	25	20447	2
[	Ba	137	8.520	ug/L	0.193	2	52	34807	2
[>	Tb	159		ug/L			324505	376621	1
[	Tl	205	0.004	ug/L	0.000	11	40	147	9
[	Pb	208	0.109	ug/L	0.005	4	384	4289	4
[	Bi	209		ug/L			267172	286345	2
[	Th	232	0.004	ug/L	0.000	11	145	340	4
[	U	238	0.001	ug/L	0.000	13	41	109	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 15:34:41
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	265657	9
[	Be	9	-0.006	ug/L	0.009	148	7	6	60
	C	13		mg/L			3587	4346	4
	Cl	37		mg/L			2863468	3722022	2
[>	Sc	45		ug/L			195484	279190	9
|	V	51	0.405	ug/L	0.031	7	1040	6552	3
|	V-1	51	0.559	ug/L	0.051	9	3029	11443	3
|	Cr	52	0.030	ug/L	0.015	49	3579	5442	7
|	Cr	53	0.525	ug/L	0.078	14	1040	2179	5
|	Mn	55	3.420	ug/L	0.085	2	730	63025	10
[	Co	59	0.009	ug/L	0.001	7	99	261	12
[>	Ge	72		ug/L			272490	344227	8
|	Ni	60	0.034	ug/L	0.005	14	85	197	8
|	Ni	62	0.262	ug/L	0.058	21	50	169	16
|	Cu	63	0.491	ug/L	0.013	2	308	3415	7
|	Cu	65	0.350	ug/L	0.009	2	120	1172	10
|	Zn	66	2.797	ug/L	0.090	3	338	5808	10
|	Zn	67	2.812	ug/L	0.079	2	126	1070	6
|	Zn	68	1.724	ug/L	0.229	13	5436	9182	4
|	As	75	0.780	ug/L	0.010	1	318	2070	7
|	As-1	75	0.179	ug/L	0.232	129	6563	8642	2
|	Se	82	0.189	ug/L	0.072	37	-17	15	96
|	Se	78	-2.876	ug/L	1.064	36	6620	7003	1
[	Mo	98	1.028	ug/L	0.025	2	298	7698	7
	Y	89		ug/L			246203	334909	9
	Kr	83		ug/L			174	163	3
[>	In	115		ug/L			260797	362808	7
|	Ag	107	0.004	ug/L	0.001	25	39	107	18
|	Cd	111	0.011	ug/L	0.014	123	144	236	20
|	Cd	114	0.013	ug/L	0.001	8	18	117	11
|	Sb	121	0.036	ug/L	0.001	3	136	621	5
|	Sb	123	0.035	ug/L	0.003	8	117	485	5
|	Ba	135	3.325	ug/L	0.113	3	25	8736	9
[	Ba	137	3.280	ug/L	0.046	1	52	15122	9
[>	Tb	159		ug/L			324505	431019	10
|	Tl	205	0.005	ug/L	0.000	8	40	195	11
|	Pb	208	0.469	ug/L	0.003	0	384	19381	9
|	Bi	209		ug/L			267172	332640	10
|	Th	232	0.231	ug/L	0.002	0	145	11141	10
[	U	238	0.015	ug/L	0.001	4	41	833	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, November 29, 2012 15:41:00
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	209787	3
[	Be	9	53.299	ug/L	0.562	1	7	15683	2
	C	13		mg/L			3587	2407	4
	Cl	37		mg/L			2863468	3491045	0
[>	Sc	45		ug/L			195484	215202	2
[	V	51	49.779	ug/L	0.667	1	1040	484214	3
[	V-1	51	50.159	ug/L	0.297	0	3029	498447	3
[	Cr	52	49.339	ug/L	1.125	2	3579	428838	4
[	Cr	53	50.531	ug/L	0.192	0	1040	53010	3
[	Mn	55	48.735	ug/L	0.469	0	730	681412	1
[	Co	59	50.193	ug/L	0.176	0	99	533602	2
[>	Ge	72		ug/L			272490	277936	3
[	Ni	60	53.196	ug/L	1.047	1	85	114579	1
[	Ni	62	52.887	ug/L	0.593	1	50	17168	2
[	Cu	63	52.740	ug/L	0.476	0	308	263114	3
[	Cu	65	52.369	ug/L	0.753	1	120	123320	2
[	Zn	66	52.202	ug/L	0.947	1	338	81300	2
[	Zn	67	52.101	ug/L	0.026	0	126	13768	3
[	Zn	68	51.735	ug/L	1.003	1	5436	62012	2
[	As	75	51.251	ug/L	0.523	1	318	88765	2
[	As-1	75	51.069	ug/L	0.730	1	6563	93531	2
[	Se	82	50.185	ug/L	0.677	1	-17	7872	2
[	Se	78	49.261	ug/L	1.767	3	6620	25175	2
[	Mo	98	53.417	ug/L	0.974	1	298	307665	2
	Y	89		ug/L			246203	263521	1
	Kr	83		ug/L			174	170	4
[>	In	115		ug/L			260797	296506	3
[	Ag	107	49.324	ug/L	0.905	1	39	501500	2
[	Cd	111	48.483	ug/L	0.651	1	144	124855	2
[	Cd	114	48.384	ug/L	0.401	0	18	283224	2
[	Sb	121	48.938	ug/L	0.932	1	136	482335	3
[	Sb	123	48.912	ug/L	0.861	1	117	370376	2
[	Ba	135	48.673	ug/L	0.589	1	25	104025	2
[	Ba	137	47.792	ug/L	0.920	1	52	179084	1
[>	Tb	159		ug/L			324505	348852	3
[	Tl	205	47.065	ug/L	0.491	1	40	1118758	2
[	Pb	208	47.324	ug/L	0.731	1	384	1541585	3
[	Bi	209		ug/L			267172	267483	4
[	Th	232	45.365	ug/L	0.541	1	145	1741505	4
[	U	238	43.409	ug/L	0.583	1	41	1851689	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, November 29, 2012 15:47:39
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	211070	2
[	Be	9	0.014	ug/L	0.012	82	7	11	29
	C	13		mg/L			3587	3138	4
	Cl	37		mg/L			2863468	3475005	0
[>	Sc	45		ug/L			195484	205797	0
[	V	51	-0.005	ug/L	0.013	267	1040	1047	10
[	V-1	51	0.229	ug/L	0.010	4	3029	5345	1
[	Cr	52	0.003	ug/L	0.013	397	3579	3794	2
[	Cr	53	0.721	ug/L	0.029	4	1040	1803	2
[	Mn	55	0.013	ug/L	0.002	17	730	940	3
[	Co	59	-0.003	ug/L	0.001	25	99	70	11
[>	Ge	72		ug/L			272490	270720	1
[	Ni	60	-0.015	ug/L	0.003	21	85	53	13
[	Ni	62	0.104	ug/L	0.043	41	50	82	16
[	Cu	63	0.023	ug/L	0.012	53	308	416	13
[	Cu	65	-0.010	ug/L	0.003	25	120	96	6
[	Zn	66	0.012	ug/L	0.023	189	338	353	8
[	Zn	67	0.107	ug/L	0.049	45	126	152	6
[	Zn	68	-0.008	ug/L	0.066	848	5436	5392	0
[	As	75	-0.004	ug/L	0.007	192	318	310	5
[	As-1	75	0.062	ug/L	0.041	65	6563	6624	0
[	Se	82	0.042	ug/L	0.103	242	-17	-10	142
[	Se	78	0.293	ug/L	0.177	60	6620	6683	0
[	Mo	98	-0.040	ug/L	0.003	6	298	71	21
	Y	89		ug/L			246203	252902	0
	Kr	83		ug/L			174	165	4
[>	In	115		ug/L			260797	283639	0
[	Ag	107	0.000	ug/L	0.002	628	39	46	49
[	Cd	111	0.007	ug/L	0.002	33	144	173	3
[	Cd	114	-0.001	ug/L	0.001	97	18	14	35
[	Sb	121	0.015	ug/L	0.006	41	136	285	20
[	Sb	123	0.010	ug/L	0.005	46	117	203	18
[	Ba	135	0.004	ug/L	0.005	131	25	35	26
[	Ba	137	-0.000	ug/L	0.002	326	52	55	9
[>	Tb	159		ug/L			324505	333048	1
[	Tl	205	0.004	ug/L	0.001	28	40	132	20
[	Pb	208	-0.000	ug/L	0.001	441	384	391	5
[	Bi	209		ug/L			267172	260788	1
[	Th	232	0.016	ug/L	0.005	31	145	739	26
[	U	238	0.000	ug/L	0.000	54	41	59	17

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 O RHN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 16:07:14
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			238098	341472	3
[	**Be**	**9**	**-0.005**	ug/L	0.001	13	7	8	0
	C	**13**		mg/L			3587	5352	2
	Cl	**37**		mg/L			2863468	3633103	1
[>	**Sc**	**45**		ug/L			195484	337513	3
[	**V**	**51**	**0.341**	ug/L	0.008	2	1040	6985	4
[	**V-1**	**51**	**0.263**	ug/L	0.007	2	3029	9300	3
[	**Cr**	**52**	**0.026**	ug/L	0.016	60	3579	6522	0
[	**Cr**	**53**	**-0.198**	ug/L	0.025	12	1040	1477	1
[	**Mn**	**55**	**7.906**	ug/L	0.111	1	730	174395	2
[	**Co**	**59**	**0.125**	ug/L	0.003	2	99	2261	3
[>	**Ge**	**72**		ug/L			272490	387394	1
[	**Ni**	**60**	**0.699**	ug/L	0.038	5	85	2219	6
[	**Ni**	**62**	**0.619**	ug/L	0.046	7	50	350	4
[	**Cu**	**63**	**7.964**	ug/L	0.117	1	308	55747	0
[	**Cu**	**65**	**7.990**	ug/L	0.123	1	120	26379	2
[	**Zn**	**66**	**21.703**	ug/L	0.082	0	338	47410	1
[	**Zn**	**67**	**19.455**	ug/L	0.214	1	126	7277	0
[	**Zn**	**68**	**19.765**	ug/L	0.214	1	5436	37816	2
[	**As**	**75**	**0.994**	ug/L	0.007	0	318	2843	2
[	**As-1**	**75**	**0.134**	ug/L	0.079	59	6563	9646	0
[	**Se**	**82**	**0.195**	ug/L	0.111	56	-17	17	137
[	**Se**	**78**	**-4.145**	ug/L	0.364	8	6620	7247	0
[	**Mo**	**98**	**1.092**	ug/L	0.026	2	298	9187	3
	Y	**89**		ug/L			246203	372318	4
	Kr	**83**		ug/L			174	167	7
[>	**In**	**115**		ug/L			260797	386338	1
[	**Ag**	**107**	**0.000**	ug/L	0.000	107	39	63	9
[	**Cd**	**111**	**0.154**	ug/L	0.014	9	144	729	8
[	**Cd**	**114**	**0.142**	ug/L	0.006	4	18	1106	2
[	**Sb**	**121**	**0.130**	ug/L	0.004	2	136	1865	4
[	**Sb**	**123**	**0.128**	ug/L	0.008	6	117	1441	7
[	**Ba**	**135**	**10.520**	ug/L	0.064	0	25	29331	2
[	**Ba**	**137**	**10.371**	ug/L	0.117	1	52	50721	2
[>	**Tb**	**159**		ug/L			324505	475766	2
[	**Tl**	**205**	**0.005**	ug/L	0.000	8	40	234	7
[	**Pb**	**208**	**0.294**	ug/L	0.003	1	384	13612	3
[	**Bi**	**209**		ug/L			267172	389863	3
[	**Th**	**232**	**0.023**	ug/L	0.004	18	145	1440	15
[	**U**	**238**	**0.063**	ug/L	0.001	1	41	3750	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 T RHN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, November 29, 2012 16:13:32
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	288786	5
[	Be	9	-0.002	ug/L	0.009	440	7	8	37
	C	13		mg/L			3587	3077	3
	Cl	37		mg/L			2863468	3496626	2
[>	Sc	45		ug/L			195484	267938	5
|	V	51	0.218	ug/L	0.013	6	1040	4055	6
|	V-1	51	0.194	ug/L	0.025	12	3029	6524	2
|	Cr	52	0.008	ug/L	0.010	128	3579	4990	4
|	Cr	53	-0.054	ug/L	0.073	135	1040	1353	1
|	Mn	55	23.426	ug/L	0.624	2	730	408534	6
[	Co	59	0.390	ug/L	0.018	4	99	5301	8
[>	Ge	72		ug/L			272490	331241	4
|	Ni	60	1.918	ug/L	0.124	6	85	5032	9
|	Ni	62	1.743	ug/L	0.089	5	50	734	8
|	Cu	63	1.217	ug/L	0.048	3	308	7608	7
|	Cu	65	1.287	ug/L	0.050	3	120	3760	7
|	Zn	66	223.883	ug/L	8.022	3	338	414744	7
|	Zn	67	197.919	ug/L	7.344	3	126	61952	7
|	Zn	68	215.987	ug/L	7.948	3	5436	287973	7
|	As	75	0.662	ug/L	0.016	2	318	1750	5
|	As-1	75	0.140	ug/L	0.091	64	6563	8258	2
|	Se	82	0.232	ug/L	0.050	21	-17	21	42
|	Se	78	-2.426	ug/L	0.463	19	6620	6959	1
[	Mo	98	0.093	ug/L	0.006	6	298	1000	8
	Y	89		ug/L			246203	317409	5
	Kr	83		ug/L			174	165	5
[>	In	115		ug/L			260797	325811	3
|	Ag	107	-0.001	ug/L	0.001	56	39	38	11
|	Cd	111	0.978	ug/L	0.081	8	144	2948	10
|	Cd	114	0.928	ug/L	0.062	6	18	6003	9
|	Sb	121	-0.001	ug/L	0.001	76	136	157	7
|	Sb	123	-0.003	ug/L	0.002	67	117	119	18
|	Ba	135	7.458	ug/L	0.345	4	25	17564	7
[	Ba	137	7.305	ug/L	0.284	3	52	30172	7
[>	Tb	159		ug/L			324505	402646	4
|	Tl	205	0.007	ug/L	0.000	5	40	234	4
|	Pb	208	0.034	ug/L	0.000	0	384	1768	4
|	Bi	209		ug/L			267172	326120	5
|	Th	232	0.002	ug/L	0.001	32	145	250	13
[	U	238	0.040	ug/L	0.003	8	41	2029	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 W RHN
Sample Dil Factor: 10 Del
Comments:
Sample Date/Time: Thursday, November 29, 2012 16:19:50
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	295226	3
[	Be	9	-0.012	ug/L	0.003	28	7	5	25
	C	13		mg/L			3587	3171	1
	Cl	37		mg/L			2863468	3447884	1
[>	Sc	45		ug/L			195484	~~264712~~	3
[	V	51	0.148	ug/L	0.018	11	1040	3174	8
[	V-1	51	0.105	ug/L	0.020	18	3029	5379	4
[	Cr	52	-0.015	ug/L	0.005	35	3579	4685	2
[	Cr	53	-0.137	ug/L	0.043	31	1040	1234	1
[	Mn	55	24.262	ug/L	1.494	6	730	418102	8
[	Co	59	0.402	ug/L	0.037	9	99	5400	10
[>	Ge	72		ug/L			272490	~~333219~~	2
[	Ni	60	1.967	ug/L	0.182	9	85	5186	10
[	Ni	62	1.796	ug/L	0.185	10	50	758	10
[	Cu	63	0.982	ug/L	0.072	7	308	6249	8
[	Cu	65	1.066	ug/L	0.074	6	120	3155	8
[	Zn	66	237.332	ug/L	13.901	5	338	442228	8
[	Zn	67	208.912	ug/L	13.203	6	126	65770	8
[	Zn	68	226.705	ug/L	11.783	5	5436	303690	7
[	As	75	0.069	ug/L	0.009	13	318	532	2
[	As-1	75	-0.508	ug/L	0.069	13	6563	6988	1
[	Se	82	0.243	ug/L	0.032	13	-17	24	22
[	Se	78	-2.659	ug/L	0.324	12	6620	6900	0
[	Mo	98	0.116	ug/L	0.015	13	298	1168	11
	Y	89		ug/L			246203	306426	3
	Kr	83		ug/L			174	160	1
[>	In	115		ug/L			260797	322865	2
[	Ag	107	-0.001	ug/L	0.001	51	39	36	15
[	Cd	111	0.996	ug/L	0.062	6	144	2969	8
[	Cd	114	0.999	ug/L	0.044	4	18	6395	5
[	Sb	121	-0.002	ug/L	0.002	82	136	147	13
[	Sb	123	-0.004	ug/L	0.001	35	117	114	6
[	Ba	135	7.381	ug/L	0.566	7	25	17225	9
[	Ba	137	7.460	ug/L	0.505	6	52	30534	8
[>	Tb	159		ug/L			324505	398768	2
[	Tl	205	0.006	ug/L	0.001	14	40	204	13
[	Pb	208	0.013	ug/L	0.001	7	384	958	3
[	Bi	209		ug/L			267172	328759	2
[	Th	232	0.001	ug/L	0.001	193	145	208	25
[	U	238	0.028	ug/L	0.001	5	41	1397	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS36 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 16:28:52
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			238098	302125	2
[	**Be**	**9**	**-0.012**	ug/L	0.011	93	7	5	90
	C	**13**		mg/L			3587	5289	4
	Cl	**37**		mg/L			2863468	3499070	0
[>	**Sc**	**45**		ug/L			195484	267433	2
[	**V**	**51**	**0.446**	ug/L	0.026	5	1040	6794	4
[	**V-1**	**51**	**0.384**	ug/L	0.026	6	3029	8851	1
[	**Cr**	**52**	**0.325**	ug/L	0.022	6	3579	8370	1
[	**Cr**	**53**	**0.143**	ug/L	0.087	60	1040	1603	4
[	**Mn**	**55**	**44.944**	ug/L	1.089	2	730	780850	1
[	**Co**	**59**	**0.200**	ug/L	0.005	2	99	2776	2
[>	**Ge**	**72**		ug/L			272490	~~342326~~	0
[	**Ni**	**60**	**1.738**	ug/L	0.085	4	85	~~4715~~	4
[	**Ni**	**62**	**1.722**	ug/L	0.106	6	50	750	6
[	**Cu**	**63**	**10.615**	ug/L	0.143	1	308	65540	0
[	**Cu**	**65**	**10.553**	ug/L	0.052	0	120	30739	0
[	**Zn**	**66**	**44.073**	ug/L	0.474	1	338	84641	0
[	**Zn**	**67**	**39.194**	ug/L	0.105	0	126	12796	0
[	**Zn**	**68**	**42.397**	ug/L	0.774	1	5436	63851	1
[	**As**	**75**	**0.295**	ug/L	0.014	4	318	1027	3
[	**As-1**	**75**	**-0.338**	ug/L	0.029	8	6563	7537	0
[	**Se**	**82**	**0.071**	ug/L	0.092	130	-17	-8	209
[	**Se**	**78**	**-3.090**	ug/L	0.192	6	6620	6892	1
[	**Mo**	**98**	**0.735**	ug/L	0.016	2	298	5588	2
	Y	**89**		ug/L			246203	319535	1
	Kr	**83**		ug/L			174	168	9
[>	**In**	**115**		ug/L			260797	336267	2
[	**Ag**	**107**	**0.001**	ug/L	0.001	56	39	65	12
[	**Cd**	**111**	**0.049**	ug/L	0.002	4	144	328	2
[	**Cd**	**114**	**0.046**	ug/L	0.004	9	18	326	7
[	**Sb**	**121**	**0.420**	ug/L	0.011	2	136	4868	0
[	**Sb**	**123**	**0.427**	ug/L	0.012	2	117	3814	0
[	**Ba**	**135**	**24.735**	ug/L	0.792	3	25	59959	2
[	**Ba**	**137**	**24.730**	ug/L	0.777	3	52	105122	1
[>	**Tb**	**159**		ug/L			324505	412011	1
[	**Tl**	**205**	**0.003**	ug/L	0.001	20	40	123	9
[	**Pb**	**208**	**0.723**	ug/L	0.010	1	384	28284	1
[	**Bi**	**209**		ug/L			267172	340037	2
[	**Th**	**232**	**0.006**	ug/L	0.000	4	145	449	3
[	**U**	**238**	**0.012**	ug/L	0.000	4	41	653	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 16:35:09
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	307704	0
[	Be	9	24.024	ug/L	0.236	0	7	10376	0
	C	13		mg/L			3587	5602	3
	Cl	37		mg/L			2863468	3489059	0
[>	Sc	45		ug/L			195484	276947	0
[	V	51	24.084	ug/L	0.554	2	1040	302231	2
[	V-1	51	24.045	ug/L	0.450	1	3029	309715	2
[	Cr	52	23.674	ug/L	0.221	0	3579	267405	1
[	Cr	53	23.573	ug/L	0.189	0	1040	32609	0
[	Mn	55	24.444	ug/L	0.295	1	730	440465	1
[	Co	59	23.509	ug/L	0.350	1	99	321720	1
[>	Ge	72		ug/L			272490	346993	0
[	Ni	60	25.902	ug/L	0.211	0	85	69743	0
[	Ni	62	25.637	ug/L	0.408	1	50	10425	1
[	Cu	63	26.188	ug/L	0.396	1	308	163324	1
[	Cu	65	25.992	ug/L	0.289	1	120	76517	0
[	Zn	66	82.044	ug/L	0.678	0	338	159345	0
[	Zn	67	75.461	ug/L	0.797	1	126	24823	1
[	Zn	68	79.250	ug/L	1.207	1	5436	114965	1
[	As	75	25.879	ug/L	0.394	1	318	56172	1
[	As-1	75	24.224	ug/L	0.190	0	6563	59800	0
[	Se	82	81.766	ug/L	1.480	1	-17	16030	1
[	Se	78	77.781	ug/L	0.705	0	6620	44771	0
[	Mo	98	24.172	ug/L	0.390	1	298	174086	1
	Y	89		ug/L			246203	325924	0
	Kr	83		ug/L			174	174	3
[>	In	115		ug/L			260797	342271	0
[	Ag	107	23.754	ug/L	0.602	2	39	278842	1
[	Cd	111	23.337	ug/L	0.365	1	144	69473	0
[	Cd	114	23.271	ug/L	0.190	0	18	157279	0
[	Sb	121	22.484	ug/L	0.529	2	136	255912	1
[	Sb	123	22.662	ug/L	0.301	1	117	198206	0
[	Ba	135	23.885	ug/L	0.618	2	25	58947	2
[	Ba	137	23.570	ug/L	0.327	1	52	102021	0
[>	Tb	159		ug/L			324505	423141	0
[	Tl	205	24.679	ug/L	0.598	2	40	711736	2
[	Pb	208	24.524	ug/L	0.579	2	384	969417	1
[	Bi	209		ug/L			267172	344392	0
[	Th	232	24.190	ug/L	0.570	2	145	1126241	2
[	U	238	22.885	ug/L	0.526	2	41	1184198	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS44 A REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, November 29, 2012 16:41:25
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			238098	293340	1
[	**Be**	**9**	**-0.001**	ug/L	0.007	518	7	9	34
	C	**13**		mg/L			3587	3171	3
	Cl	**37**		mg/L			2863468	3504166	0
[>	**Sc**	**45**		ug/L			195484	270938	0
|	**V**	**51**	**0.488**	ug/L	0.011	2	1040	7399	1
|	**V-1**	**51**	**0.433**	ug/L	0.013	3	3029	9583	1
|	**Cr**	**52**	**0.101**	ug/L	0.007	7	3579	6055	1
|	**Cr**	**53**	**-0.046**	ug/L	0.029	62	1040	1382	2
|	**Mn**	**55**	**225.974**	ug/L	5.217	2	730	3974964	2
[	**Co**	**59**	**0.234**	ug/L	0.011	4	99	3265	4
[>	**Ge**	**72**		ug/L			272490	336541	1
|	**Ni**	**60**	**0.245**	ug/L	0.014	5	85	748	6
|	**Ni**	**62**	**0.177**	ug/L	0.052	29	50	132	13
|	**Cu**	**63**	**0.187**	ug/L	0.003	1	308	1521	2
|	**Cu**	**65**	**0.162**	ug/L	0.008	5	120	614	4
|	**Zn**	**66**	**0.374**	ug/L	0.014	3	338	1127	3
|	**Zn**	**67**	**0.583**	ug/L	0.051	8	126	343	6
|	**Zn**	**68**	**-0.311**	ug/L	0.040	12	5436	6341	2
|	**As**	**75**	**128.826**	ug/L	0.814	0	318	271232	1
|	**As-1**	**75**	**130.177**	ug/L	0.856	0	6563	277849	1
|	**Se**	**82**	**0.270**	ug/L	0.054	20	-17	29	34
|	**Se**	**78**	**-2.495**	ug/L	0.248	9	6620	7086	0
[	**Mo**	**98**	**0.029**	ug/L	0.003	11	298	575	4
	Y	**89**		ug/L			246203	312550	1
	Kr	**83**		ug/L			174	164	3
[>	**In**	**115**		ug/L			260797	331616	1
|	**Ag**	**107**	**0.003**	ug/L	0.002	48	39	85	21
|	**Cd**	**111**	**0.012**	ug/L	0.007	56	144	217	8
|	**Cd**	**114**	**-0.001**	ug/L	0.001	134	18	17	52
|	**Sb**	**121**	**0.024**	ug/L	0.003	14	136	435	9
|	**Sb**	**123**	**0.022**	ug/L	0.002	10	117	332	7
|	**Ba**	**135**	**8.161**	ug/L	0.069	0	25	19536	0
[	**Ba**	**137**	**7.977**	ug/L	0.112	1	52	33499	1
[>	**Tb**	**159**		ug/L			324505	409340	2
|	**Tl**	**205**	**0.002**	ug/L	0.001	38	40	105	22
|	**Pb**	**208**	**0.013**	ug/L	0.000	3	384	994	2
|	**Bi**	**209**		ug/L			267172	334087	1
|	**Th**	**232**	**0.024**	ug/L	0.010	39	145	1270	36
[	**U**	**238**	**0.001**	ug/L	0.001	81	41	83	32

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 ADUP REN
Sample Dil Factor: 2 Dil
Comments:
Sample Date/Time: Thursday, November 29, 2012 16:47:41
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	305525	1
[	Be	9	0.009	ug/L	0.009	94	7	14	26
	C	13		mg/L			3587	5905	2
	Cl	37		mg/L			2863468	3455347	0
[>	Sc	45		ug/L			195484	283254	1
[	V	51	1.044	ug/L	0.022	2	1040	14835	1
[	V-1	51	0.945	ug/L	0.030	3	3029	16666	0
[	Cr	52	0.554	ug/L	0.026	4	3579	11463	1
[	Cr	53	0.277	ug/L	0.058	20	1040	1880	2
[	Mn	55	99.450	ug/L	2.407	2	730	1828967	0
[	Co	59	0.147	ug/L	0.005	3	99	2200	3
[>	Ge	72		ug/L			272490	343083	1
[	Ni	60	1.450	ug/L	0.016	1	85	3962	1
[	Ni	62	1.319	ug/L	0.075	5	50	590	4
[	Cu	63	2.634	ug/L	0.057	2	308	16589	1
[	Cu	65	2.648	ug/L	0.065	2	120	7843	1
[	Zn	66	3.601	ug/L	0.056	1	338	7321	0
[	Zn	67	3.620	ug/L	0.200	5	126	1329	5
[	Zn	68	2.754	ug/L	0.072	2	5436	10556	0
[	As	75	1.174	ug/L	0.030	2	318	2903	1
[	As-1	75	0.614	ug/L	0.106	17	6563	9551	1
[	Se	82	0.267	ug/L	0.054	20	-17	29	36
[	Se	78	-2.680	ug/L	0.351	13	6620	7096	1
[	Mo	98	0.248	ug/L	0.005	1	298	2139	2
	Y	89		ug/L			246203	322336	0
	Kr	83		ug/L			174	156	6
[>	In	115		ug/L			260797	333448	0
[	Ag	107	0.014	ug/L	0.002	12	39	211	10
[	Cd	111	0.030	ug/L	0.018	59	144	270	18
[	Cd	114	0.015	ug/L	0.002	10	18	121	8
[	Sb	121	0.194	ug/L	0.004	1	136	2326	1
[	Sb	123	0.189	ug/L	0.009	4	117	1756	4
[	Ba	135	10.065	ug/L	0.084	0	25	24220	1
[	Ba	137	9.858	ug/L	0.284	2	52	41605	2
[>	Tb	159		ug/L			324505	415580	0
[	Tl	205	0.013	ug/L	0.001	8	40	426	6
[	Pb	208	0.476	ug/L	0.011	2	384	18948	1
[	Bi	209		ug/L			267172	341416	0
[	Th	232	0.059	ug/L	0.003	4	145	2891	3
[	U	238	0.031	ug/L	0.001	1	41	1604	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 A REN
Sample Dil Factor: 2 del
Comments:
Sample Date/Time: Thursday, November 29, 2012 16:53:58
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	297927	2
[	Be	9	0.006	ug/L	0.011	176	7	12	36
	C	13		mg/L			3587	5605	2
	Cl	37		mg/L			2863468	3378262	0
[>	Sc	45		ug/L			195484	271501	0
[	V	51	1.055	ug/L	0.011	1	1040	14365	1
[	V-1	51	0.970	ug/L	0.008	0	3029	16290	1
[	Cr	52	0.565	ug/L	0.022	3	3579	11113	2
[	Cr	53	0.329	ug/L	0.027	8	1040	1871	2
[	Mn	55	99.908	ug/L	0.950	0	730	1761716	1
[	Co	59	0.144	ug/L	0.005	3	99	2067	2
[>	Ge	72		ug/L			272490	335550	1
[	Ni	60	1.427	ug/L	0.008	0	85	3814	1
[	Ni	62	1.437	ug/L	0.097	6	50	623	4
[	Cu	63	3.165	ug/L	0.032	1	308	19422	2
[	Cu	65	3.220	ug/L	0.075	2	120	9296	1
[	Zn	66	3.555	ug/L	0.130	3	338	7072	1
[	Zn	67	3.487	ug/L	0.187	5	126	1257	2
[	Zn	68	2.732	ug/L	0.210	7	5436	10293	0
[	As	75	1.167	ug/L	0.027	2	318	2823	0
[	As-1	75	0.590	ug/L	0.094	15	6563	9293	0
[	Se	82	0.196	ug/L	0.030	15	-17	15	38
[	Se	78	-2.764	ug/L	0.308	11	6620	6902	0
[	Mo	98	0.242	ug/L	0.010	3	298	2045	1
	Y	89		ug/L			246203	308921	1
	Kr	83		ug/L			174	164	4
[>	In	115		ug/L			260797	321875	2
[	Ag	107	0.003	ug/L	0.001	36	39	81	12
[	Cd	111	0.025	ug/L	0.012	46	144	247	13
[	Cd	114	0.007	ug/L	0.002	24	18	67	14
[	Sb	121	0.190	ug/L	0.003	1	136	2201	2
[	Sb	123	0.186	ug/L	0.003	1	117	1670	1
[	Ba	135	10.266	ug/L	0.255	2	25	23837	0
[	Ba	137	10.177	ug/L	0.119	1	52	41458	1
[>	Tb	159		ug/L			324505	405263	1
[	Tl	205	0.004	ug/L	0.000	8	40	155	4
[	Pb	208	0.469	ug/L	0.011	2	384	18221	1
[	Bi	209		ug/L			267172	329334	2
[	Th	232	0.019	ug/L	0.001	5	145	1025	4
[	U	238	0.021	ug/L	0.001	4	41	1088	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 17:00:18
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	295261	0
[	Be	9	24.752	ug/L	0.439	1	7	10257	1
	C	13		mg/L			3587	5674	0
	Cl	37		mg/L			2863468	3368169	0
[>	Sc	45		ug/L			195484	276941	0
[	V	51	23.752	ug/L	0.461	1	1040	298055	1
[	V-1	51	23.775	ug/L	0.378	1	3029	306276	1
[	Cr	52	23.023	ug/L	0.195	0	3579	260178	0
[	Cr	53	23.134	ug/L	0.072	0	1040	32029	0
[	Mn	55	124.432	ug/L	0.874	0	730	2237775	0
[	Co	59	22.639	ug/L	0.231	1	99	309813	0
[>	Ge	72		ug/L			272490	344944	0
[	Ni	60	26.159	ug/L	0.217	0	85	70017	0
[	Ni	62	25.717	ug/L	0.418	1	50	10396	1
[	Cu	63	26.965	ug/L	0.113	0	308	167164	0
[	Cu	65	26.543	ug/L	0.539	2	120	77673	1
[	Zn	66	81.661	ug/L	0.844	1	338	157666	0
[	Zn	67	75.983	ug/L	1.221	1	126	24845	1
[	Zn	68	78.889	ug/L	0.789	0	5436	113798	0
[	As	75	27.051	ug/L	0.335	1	318	58352	1
[	As-1	75	25.429	ug/L	0.267	1	6563	61990	0
[	Se	82	79.970	ug/L	0.506	0	-17	15585	0
[	Se	78	75.975	ug/L	0.148	0	6620	43668	0
[	Mo	98	24.082	ug/L	0.119	0	298	172421	0
	Y	89		ug/L			246203	319460	0
	Kr	83		ug/L			174	181	1
[>	In	115		ug/L			260797	326791	0
[	Ag	107	23.217	ug/L	0.101	0	39	260237	0
[	Cd	111	23.546	ug/L	0.050	0	144	66929	0
[	Cd	114	23.287	ug/L	0.102	0	18	150274	1
[	Sb	121	23.020	ug/L	0.227	0	136	250197	1
[	Sb	123	23.061	ug/L	0.150	0	117	192579	0
[	Ba	135	34.987	ug/L	0.349	0	25	82432	0
[	Ba	137	34.515	ug/L	0.354	1	52	142612	0
[>	Tb	159		ug/L			324505	413791	0
[	Tl	205	24.136	ug/L	0.291	1	40	680674	0
[	Pb	208	24.558	ug/L	0.075	0	384	949392	1
[	Bi	209		ug/L			267172	332776	0
[	Th	232	21.964	ug/L	0.326	1	145	999954	1
[	U	238	23.301	ug/L	0.196	0	41	1179203	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 17:06:37
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	296118	1
[	Be	9	0.005	ug/L	0.007	128	7	12	23
	C	13		mg/L			3587	5613	2
	Cl	37		mg/L			2863468	3322422	1
[>	Sc	45		ug/L			195484	263038	2
[	V	51	0.925	ug/L	0.041	4	1040	12359	2
[	V-1	51	0.847	ug/L	0.026	3	3029	14287	2
[	Cr	52	0.414	ug/L	0.038	9	3579	9161	1
[	Cr	53	0.201	ug/L	0.021	10	1040	1651	2
[	Mn	55	29.899	ug/L	0.412	1	730	511358	1
[	Co	59	0.082	ug/L	0.004	4	99	1196	1
[>	Ge	72		ug/L			272490	331062	1
[	Ni	60	1.156	ug/L	0.041	3	85	3067	2
[	Ni	62	1.009	ug/L	0.045	4	50	450	4
[	Cu	63	2.458	ug/L	0.040	1	308	14962	0
[	Cu	65	2.444	ug/L	0.049	1	120	6998	3
[	Zn	66	2.202	ug/L	0.064	2	338	4478	1
[	Zn	67	2.288	ug/L	0.135	5	126	867	5
[	Zn	68	1.289	ug/L	0.149	11	5436	8280	1
[	As	75	1.163	ug/L	0.026	2	318	2778	1
[	As-1	75	0.623	ug/L	0.054	8	6563	9236	0
[	Se	82	0.232	ug/L	0.057	24	-17	21	48
[	Se	78	-2.584	ug/L	0.258	9	6620	6890	0
[	Mo	98	0.238	ug/L	0.011	4	298	1995	2
	Y	89		ug/L			246203	306541	0
	Kr	83		ug/L			174	157	0
[>	In	115		ug/L			260797	315546	0
[	Ag	107	0.010	ug/L	0.002	18	39	157	13
[	Cd	111	0.016	ug/L	0.015	92	144	217	17
[	Cd	114	0.008	ug/L	0.002	21	18	73	14
[	Sb	121	0.180	ug/L	0.002	1	136	2055	1
[	Sb	123	0.175	ug/L	0.007	4	117	1549	4
[	Ba	135	8.741	ug/L	0.108	1	25	19909	1
[	Ba	137	8.814	ug/L	0.172	1	52	35215	2
[>	Tb	159		ug/L			324505	395200	1
[	Tl	205	0.007	ug/L	0.001	13	40	245	10
[	Pb	208	0.282	ug/L	0.004	1	384	10875	0
[	Bi	209		ug/L			267172	323597	1
[	Th	232	0.059	ug/L	0.011	18	145	2748	17
[	U	238	0.024	ug/L	0.002	6	41	1208	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, November 29, 2012 17:12:57
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	243868	1
[	Be	9	50.120	ug/L	0.372	0	7	17148	1
	C	13		mg/L			3587	2286	3
	Cl	37		mg/L			2863468	3145861	1
[>	Sc	45		ug/L			195484	207035	3
[	V	51	50.356	ug/L	0.445	0	1040	471098	2
[	V-1	51	50.357	ug/L	0.272	0	3029	481349	2
[	Cr	52	49.507	ug/L	1.258	2	3579	413762	2
[	Cr	53	49.556	ug/L	0.915	1	1040	50033	3
[	Mn	55	49.861	ug/L	1.143	2	730	670684	3
[	Co	59	50.317	ug/L	1.367	2	99	514550	3
[>	Ge	72		ug/L			272490	277377	0
[	Ni	60	50.810	ug/L	1.170	2	85	109286	2
[	Ni	62	50.833	ug/L	0.683	1	50	16474	1
[	Cu	63	50.278	ug/L	0.895	1	308	250390	2
[	Cu	65	51.196	ug/L	0.656	1	120	120364	1
[	Zn	66	50.515	ug/L	0.644	1	338	78564	2
[	Zn	67	50.029	ug/L	1.405	2	126	13199	2
[	Zn	68	50.340	ug/L	1.103	2	5436	60398	2
[	As	75	50.338	ug/L	0.851	1	318	87043	2
[	As-1	75	50.273	ug/L	0.709	1	6563	92026	1
[	Se	82	50.273	ug/L	1.206	2	-17	7872	2
[	Se	78	49.944	ug/L	1.078	2	6620	25391	1
[	Mo	98	50.358	ug/L	1.095	2	298	289610	2
	Y	89		ug/L			246203	253494	2
	Kr	83		ug/L			174	170	7
[>	In	115		ug/L			260797	266663	3
[	Ag	107	49.463	ug/L	1.117	2	39	452262	2
[	Cd	111	49.220	ug/L	0.577	1	144	113978	1
[	Cd	114	48.716	ug/L	0.104	0	18	256503	2
[	Sb	121	48.955	ug/L	0.534	1	136	433892	1
[	Sb	123	49.395	ug/L	1.006	2	117	336336	1
[	Ba	135	49.499	ug/L	0.659	1	25	95133	1
[	Ba	137	49.181	ug/L	0.353	0	52	165781	2
[>	Tb	159		ug/L			324505	332516	1
[	Tl	205	49.490	ug/L	0.352	0	40	1121486	0
[	Pb	208	49.333	ug/L	1.132	2	384	1531786	0
[	Bi	209		ug/L			267172	269086	2
[	Th	232	49.299	ug/L	1.557	3	145	1802996	1
[	U	238	48.198	ug/L	0.394	0	41	1959842	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, November 29, 2012 17:19:35
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	263490	2
[	Be	9	-0.007	ug/L	0.004	55	7	6	20
	C	13		mg/L			3587	3082	1
	Cl	37		mg/L			2863468	3283642	0
[>	Sc	45		ug/L			195484	221407	2
|	V	51	-0.008	ug/L	0.015	197	1040	1099	12
|	V-1	51	-0.052	ug/L	0.003	4	3029	2902	1
|	Cr	52	-0.014	ug/L	0.008	57	3579	3925	1
|	Cr	53	-0.150	ug/L	0.042	28	1040	1020	5
|	Mn	55	-0.016	ug/L	0.001	5	730	591	0
[	Co	59	-0.003	ug/L	0.001	25	99	75	14
[>	Ge	72		ug/L			272490	298484	1
|	Ni	60	-0.013	ug/L	0.007	55	85	63	27
|	Ni	62	0.009	ug/L	0.043	499	50	58	26
|	Cu	63	-0.013	ug/L	0.003	22	308	265	4
|	Cu	65	-0.015	ug/L	0.001	3	120	95	1
|	Zn	66	-0.001	ug/L	0.007	524	338	368	3
|	Zn	67	-0.030	ug/L	0.005	18	126	130	0
|	Zn	68	-0.451	ug/L	0.094	20	5436	5425	0
|	As	75	-0.006	ug/L	0.010	167	318	338	3
|	As-1	75	-0.202	ug/L	0.052	25	6563	6819	1
|	Se	82	0.098	ug/L	0.047	47	-17	-2	282
|	Se	78	-0.933	ug/L	0.262	28	6620	6876	1
[	Mo	98	-0.042	ug/L	0.003	6	298	65	25
	Y	89		ug/L			246203	276933	1
	Kr	83		ug/L			174	167	2
[>	In	115		ug/L			260797	289588	0
|	Ag	107	0.003	ug/L	0.001	47	39	72	19
|	Cd	111	0.001	ug/L	0.002	157	144	162	3
|	Cd	114	-0.000	ug/L	0.002	538	18	18	55
|	Sb	121	0.015	ug/L	0.005	33	136	298	17
|	Sb	123	0.015	ug/L	0.010	66	117	244	32
|	Ba	135	0.008	ug/L	0.003	42	25	44	15
[	Ba	137	-0.001	ug/L	0.002	224	52	55	14
[>	Tb	159		ug/L			324505	353994	1
|	Tl	205	0.004	ug/L	0.001	20	40	150	15
|	Pb	208	0.001	ug/L	0.001	72	384	467	7
|	Bi	209		ug/L			267172	291481	1
|	Th	232	0.036	ug/L	0.009	24	145	1544	23
[	U	238	0.001	ug/L	0.000	57	41	75	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 17:25:23
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

RR Cr, Mn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	251594	3
[	Be	9	U 0.004	ug/L	0.008	227	7	9	27
	C	13		mg/L			3587	5168	0
	Cl	37		mg/L			2863468	3135658	1
[>	Sc	45		ug/L			195484	225377	3
[	V	51	0.912	ug/L	0.029	3	1040	10463	2
[	V-1	51	0.859	ug/L	0.034	3	3029	12365	1
[	Cr	52	0.404	ug/L	0.033	8	3579	7762	0
[	Cr	53	0.267	ug/L	0.053	19	1040	1485	0
[	Mn	55	28.802	ug/L	0.706	2	730	421901	1
[	Co	59	0.078	ug/L	0.000	0	99	980	3
[>	Ge	72		ug/L			272490	283566	1
[	Ni	60	1.148	ug/L	0.017	1	85	2611	2
[	Ni	62	1.098	ug/L	0.062	5	50	415	4
[	Cu	63	2.454	ug/L	0.016	0	308	12800	1
[	Cu	65	2.527	ug/L	0.023	0	120	6191	2
[	Zn	66	U 2.159	ug/L	0.050	2	338	3769	3
[	Zn	67	2.053	ug/L	0.233	11	126	680	9
[	Zn	68	1.948	ug/L	0.073	3	5436	7828	2
[	As	75	1.227	ug/L	0.020	1	318	2492	1
[	As-1	75	1.161	ug/L	0.036	3	6563	8844	0
[	Se	82	U 0.197	ug/L	0.064	32	-17	13	77
[	Se	78	-0.266	ug/L	0.132	49	6620	6787	0
[	Mo	98	0.247	ug/L	0.003	1	298	1760	1
	Y	89		ug/L			246203	260436	0
	Kr	83		ug/L			174	167	4
[>	In	115		ug/L			260797	273680	1
[	Ag	107	U 0.008	ug/L	0.001	6	39	118	3
[	Cd	111	U 0.018	ug/L	0.012	67	144	193	15
[	Cd	114	0.006	ug/L	0.003	46	18	49	27
[	Sb	121	U 0.183	ug/L	0.003	1	136	1808	2
[	Sb	123	0.187	ug/L	0.007	3	117	1428	3
[	Ba	135	8.716	ug/L	0.202	2	25	17219	2
[	Ba	137	8.676	ug/L	0.110	1	52	30065	2
[>	Tb	159		ug/L			324505	338651	1
[	Tl	205	U 0.006	ug/L	0.001	21	40	177	18
[	Pb	208	0.274	ug/L	0.004	1	384	9078	1
[	Bi	209		ug/L			267172	277813	1
[	Th	232	0.064	ug/L	0.011	16	145	2549	17
[	U	238	0.021	ug/L	0.000	2	41	894	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 17:31:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

RR Cr, Mn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	268805	0
[	Be	9	U0.011	ug/L	0.010	95	7	12	29
	C	13		mg/L			3587	5341	1
	Cl	37		mg/L			2863468	3189758	0
[>	Sc	45		ug/L			195484	232634	0
[	V	51	0.623	ug/L	0.014	2	1040	7775	1
[	V-1	51	0.543	ug/L	0.021	3	3029	9394	1
[	Cr	52	0.294	ug/L	0.015	4	3579	6996	2
[	Cr	53	0.063	ug/L	0.046	72	1040	1308	3
[	Mn	55	19.643	ug/L	0.490	2	730	297436	1
[	Co	59	0.045	ug/L	0.003	6	99	638	6
[>	Ge	72		ug/L			272490	299826	0
[	Ni	60	0.732	ug/L	0.004	0	85	1794	1
[	Ni	62	0.661	ug/L	0.037	5	50	286	3
[	Cu	63	2.203	ug/L	0.042	1	308	12182	0
[	Cu	65	2.224	ug/L	0.043	1	120	5778	0
[	Zn	66	U1.346	ug/L	0.053	3	338	2625	3
[	Zn	67	1.288	ug/L	0.109	8	126	502	5
[	Zn	68	0.956	ug/L	0.109	11	5436	7108	2
[	As	75	0.929	ug/L	0.019	2	318	2080	2
[	As-1	75	0.674	ug/L	0.035	5	6563	8458	0
[	Se	82	U0.127	ug/L	0.011	8	-17	2	85
[	Se	78	-1.229	ug/L	0.156	12	6620	6787	0
[	Mo	98	0.227	ug/L	0.010	4	298	1739	4
	Y	89		ug/L			246203	276531	1
	Kr	83		ug/L			174	168	3
[>	In	115		ug/L			260797	287651	1
[	Ag	107	U0.003	ug/L	0.001	33	39	68	12
[	Cd	111	U0.004	ug/L	0.001	27	144	169	0
[	Cd	114	0.001	ug/L	0.000	22	18	28	5
[	Sb	121	U0.118	ug/L	0.002	1	136	1278	2
[	Sb	123	0.118	ug/L	0.001	0	117	998	1
[	Ba	135	6.176	ug/L	0.023	0	25	12832	1
[	Ba	137	6.175	ug/L	0.102	1	52	22505	1
[>	Tb	159		ug/L			324505	356968	0
[	Tl	205	U0.003	ug/L	0.000	13	40	117	8
[	Pb	208	U0.094	ug/L	0.003	2	384	3559	2
[	Bi	209		ug/L			267172	296299	1
[	Th	232	0.024	ug/L	0.003	11	145	1119	9
[	U	238	0.015	ug/L	0.001	3	41	697	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 EDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 17:38:01
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

RL Cr, Mn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	283012	2
[	Be	9	U0.002	ug/L	0.006	376	7	10	21
	C	13		mg/L			3587	5745	1
	Cl	37		mg/L			2863468	3222144	0
[>	Sc	45		ug/L			195484	248015	1
[	V	51	0.494	ug/L	0.017	3	1040	6846	1
[	V-1	51	0.404	ug/L	0.028	6	3029	8433	2
[	Cr	52	0.303	ug/L	0.023	7	3579	7547	2
[	Cr	53	0.034	ug/L	0.046	135	1040	1360	2
[	Mn	55	2.687	ug/L	0.036	1	730	44187	1
[	Co	59	0.041	ug/L	0.001	2	99	628	1
[>	Ge	72		ug/L			272490	312350	2
[	Ni	60	1.133	ug/L	0.046	4	85	2838	2
[	Ni	62	0.962	ug/L	0.144	14	50	407	10
[	Cu	63	1.998	ug/L	0.028	1	308	11543	1
[	Cu	65	2.026	ug/L	0.019	0	120	5494	1
[	Zn	66	6.625	ug/L	0.198	2	338	11934	1
[	Zn	67	5.923	ug/L	0.256	4	126	1887	3
[	Zn	68	5.797	ug/L	0.396	6	5436	13338	1
[	As	75	0.826	ug/L	0.029	3	318	1966	1
[	As-1	75	0.407	ug/L	0.103	25	6563	8300	0
[	Se	82	U0.132	ug/L	0.037	28	-17	2	221
[	Se	78	-2.032	ug/L	0.374	18	6620	6731	0
[	Mo	98	0.232	ug/L	0.010	4	298	1840	1
	Y	89		ug/L			246203	289867	3
	Kr	83		ug/L			174	162	0
[>	In	115		ug/L			260797	299663	1
[	Ag	107	U0.004	ug/L	0.001	21	39	86	10
[	Cd	111	U0.017	ug/L	0.007	39	144	210	9
[	Cd	114	0.009	ug/L	0.002	26	18	73	20
[	Sb	121	U0.181	ug/L	0.005	2	136	1961	1
[	Sb	123	0.178	ug/L	0.005	2	117	1498	4
[	Ba	135	7.563	ug/L	0.105	1	25	16361	0
[	Ba	137	7.487	ug/L	0.115	1	52	28410	0
[>	Tb	159		ug/L			324505	377735	2
[	Tl	205	U0.004	ug/L	0.000	6	40	160	7
[	Pb	208	0.118	ug/L	0.004	3	384	4597	1
[	Bi	209		ug/L			267172	309230	2
[	Th	232	0.022	ug/L	0.002	10	145	1101	7
[	U	238	0.015	ug/L	0.001	5	41	763	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 17:44:20
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

RR Cr, Mn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	285219	1
[	Be	9	u -0.005	ug/L	0.005	110	7	7	28
	C	13		mg/L			3587	5686	2
	Cl	37		mg/L			2863468	3205878	0
[>	Sc	45		ug/L			195484	247627	0
[	V	51	0.479	ug/L	0.007	1	1040	6665	1
[	V-1	51	0.390	ug/L	0.008	2	3029	8262	0
[	Cr	52	0.310	ug/L	0.023	7	3579	7606	2
[	Cr	53	0.044	ug/L	0.049	109	1040	1370	3
[	Mn	55	2.591	ug/L	0.044	1	730	42575	1
[	Co	59	0.040	ug/L	0.002	4	99	613	2
[>	Ge	72		ug/L			272490	311165	0
[	Ni	60	1.110	ug/L	0.020	1	85	2771	1
[	Ni	62	0.972	ug/L	0.045	4	50	410	4
[	Cu	63	1.924	ug/L	0.031	1	308	11084	1
[	Cu	65	1.932	ug/L	0.011	0	120	5226	0
[	Zn	66	6.688	ug/L	0.089	1	338	12003	1
[	Zn	67	5.949	ug/L	0.358	6	126	1887	5
[	Zn	68	5.924	ug/L	0.106	1	5436	13450	0
[	As	75	0.807	ug/L	0.036	4	318	1923	3
[	As-1	75	0.371	ug/L	0.068	18	6563	8201	1
[	Se	82	u 0.207	ug/L	0.067	32	-17	16	72
[	Se	78	-2.043	ug/L	0.180	8	6620	6703	0
[	Mo	98	0.226	ug/L	0.004	1	298	1794	1
	Y	89		ug/L			246203	290861	1
	Kr	83		ug/L			174	160	1
[>	In	115		ug/L			260797	299659	1
[	Ag	107	u 0.003	ug/L	0.001	38	39	80	16
[	Cd	111	u 0.010	ug/L	0.005	53	144	191	8
[	Cd	114	0.005	ug/L	0.001	16	18	48	7
[	Sb	121	u 0.172	ug/L	0.003	1	136	1870	1
[	Sb	123	0.171	ug/L	0.013	7	117	1444	5
[	Ba	135	7.416	ug/L	0.174	2	25	16041	1
[	Ba	137	7.531	ug/L	0.248	3	52	28572	2
[>	Tb	159		ug/L			324505	374841	1
[	Tl	205	u 0.004	ug/L	0.000	10	40	145	6
[	Pb	208	u 0.100	ug/L	0.001	0	384	3946	1
[	Bi	209		ug/L			267172	311420	0
[	Th	232	0.022	ug/L	0.000	2	145	1076	1
[	U	238	0.015	ug/L	0.001	4	41	721	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 ESPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 17:50:37
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

RR Cr, Mn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	270840	2
[	Be	9	25.188	ug/L	1.114	4	7	9568	1
	C	13		mg/L			3587	5729	2
	Cl	37		mg/L			2863468	3171798	0
[>	Sc	45		ug/L			195484	239923	3
[	V	51	24.882	ug/L	1.193	4	1040	270196	2
[	V-1	51	24.853	ug/L	1.325	5	3029	276908	2
[	Cr	52	24.281	ug/L	1.141	4	3579	237281	2
[	Cr	53	24.223	ug/L	1.537	6	1040	28959	3
[	Mn	55	26.734	ug/L	1.475	5	730	416780	2
[	Co	59	23.663	ug/L	1.087	4	99	280277	1
[>	Ge	72		ug/L			272490	302552	1
[	Ni	60	26.659	ug/L	0.826	3	85	62564	1
[	Ni	62	26.640	ug/L	1.296	4	50	9439	3
[	Cu	63	28.729	ug/L	1.100	3	308	156129	2
[	Cu	65	29.188	ug/L	0.807	2	120	74882	1
[	Zn	66	89.637	ug/L	1.964	2	338	151726	0
[	Zn	67	82.968	ug/L	3.084	3	126	23773	2
[	Zn	68	87.200	ug/L	3.488	3	5436	109647	2
[	As	75	27.844	ug/L	0.976	3	318	52650	1
[	As-1	75	26.647	ug/L	0.935	3	6563	56608	1
[	Se	82	82.537	ug/L	3.403	4	-17	14103	2
[	Se	78	80.669	ug/L	3.364	4	6620	40199	1
[	Mo	98	25.046	ug/L	0.998	3	298	157204	2
	Y	89		ug/L			246203	284264	2
	Kr	83		ug/L			174	171	1
[>	In	115		ug/L			260797	289563	2
[	Ag	107	24.368	ug/L	1.034	4	39	241862	1
[	Cd	111	24.446	ug/L	1.323	5	144	61513	3
[	Cd	114	24.443	ug/L	1.418	5	18	139631	3
[	Sb	121	24.592	ug/L	1.092	4	136	236633	2
[	Sb	123	24.464	ug/L	1.317	5	117	180860	3
[	Ba	135	32.760	ug/L	1.517	4	25	68345	2
[	Ba	137	32.875	ug/L	2.027	6	52	120251	3
[>	Tb	159		ug/L			324505	364620	2
[	Tl	205	25.335	ug/L	1.092	4	40	629251	2
[	Pb	208	25.718	ug/L	1.189	4	384	875530	2
[	Bi	209		ug/L			267172	295534	3
[	Th	232	25.829	ug/L	1.225	4	145	1035528	2
[	U	238	24.754	ug/L	1.340	5	41	1102995	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 17:56:54
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

RR Cr, Mn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	263092	2
[	Be	9	U 0.007	ug/L	0.007	95	7	11	19
	C	13		mg/L			3587	5345	2
	Cl	37		mg/L			2863468	3122461	1
[>	Sc	45		ug/L			195484	226149	2
[	V	51	0.646	ug/L	0.020	3	1040	7792	3
[	V-1	51	0.575	ug/L	0.017	3	3029	9474	3
[	Cr	52	0.306	ug/L	0.002	0	3579	6906	2
[	Cr	53	0.106	ug/L	0.034	32	1040	1318	4
[	Mn	55	4.606	ug/L	0.031	0	730	68467	2
[	Co	59	0.042	ug/L	0.002	5	99	585	5
[>	Ge	72		ug/L			272490	292669	1
[	Ni	60	1.105	ug/L	0.019	1	85	2596	2
[	Ni	62	0.983	ug/L	0.066	6	50	389	6
[	Cu	63	2.066	ug/L	0.038	1	308	11174	3
[	Cu	65	2.096	ug/L	0.063	2	120	5324	4
[	Zn	66	U 1.705	ug/L	0.033	1	338	3149	0
[	Zn	67	1.792	ug/L	0.016	0	126	630	1
[	Zn	68	1.363	ug/L	0.089	6	5436	7406	1
[	As	75	1.009	ug/L	0.031	3	318	2177	3
[	As-1	75	0.762	ug/L	0.006	0	6563	8415	1
[	Se	82	U 0.246	ug/L	0.039	15	-17	21	30
[	Se	78	-1.127	ug/L	0.104	9	6620	6666	0
[	Mo	98	0.243	ug/L	0.009	3	298	1794	4
	Y	89		ug/L			246203	268252	0
	Kr	83		ug/L			174	155	1
[>	In	115		ug/L			260797	278455	2
[	Ag	107	U 0.007	ug/L	0.002	24	39	108	15
[	Cd	111	U 0.010	ug/L	0.004	34	144	178	5
[	Cd	114	0.005	ug/L	0.002	31	18	48	19
[	Sb	121	U 0.174	ug/L	0.004	2	136	1752	0
[	Sb	123	0.170	ug/L	0.005	2	117	1332	2
[	Ba	135	7.796	ug/L	0.182	2	25	15674	3
[	Ba	137	7.645	ug/L	0.135	1	52	26963	3
[>	Tb	159		ug/L			324505	347692	0
[	Tl	205	U 0.005	ug/L	0.000	3	40	167	3
[	Pb	208	0.110	ug/L	0.010	9	384	3984	8
[	Bi	209		ug/L			267172	288831	1
[	Th	232	0.046	ug/L	0.012	25	145	1915	24
[	U	238	0.018	ug/L	0.001	4	41	830	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 18:03:10
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

RR Cr, Mn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	249675	7
[	Be	9	U 0.007	ug/L	0.019	289	7	10	59
	C	13		mg/L			3587	5376	3
	Cl	37		mg/L			2863468	3036635	1
[>	Sc	45		ug/L			195484	207827	5
[	V	51	0.649	ug/L	0.048	7	1040	7167	1
[	V-1	51	0.598	ug/L	0.047	7	3029	8908	0
[	Cr	52	0.350	ug/L	0.032	9	3579	6704	1
[	Cr	53	0.211	ug/L	0.028	13	1040	1314	3
[	Mn	55	4.861	ug/L	0.097	1	730	66308	3
[	Co	59	0.041	ug/L	0.003	6	99	532	9
[>	Ge	72		ug/L			272490	276397	6
[	Ni	60	1.026	ug/L	0.024	2	85	2280	4
[	Ni	62	0.877	ug/L	0.066	7	50	332	0
[	Cu	63	2.039	ug/L	0.083	4	308	10402	2
[	Cu	65	2.072	ug/L	0.075	3	120	4964	2
[	Zn	66	U 1.487	ug/L	0.062	4	338	2633	2
[	Zn	67	1.469	ug/L	0.104	7	126	510	4
[	Zn	68	1.348	ug/L	0.332	24	5436	6964	2
[	As	75	0.979	ug/L	0.052	5	318	1999	2
[	As-1	75	0.857	ug/L	0.201	23	6563	8093	2
[	Se	82	U 0.196	ug/L	0.088	44	-17	12	106
[	Se	78	-0.519	ug/L	0.809	155	6620	6509	1
[	Mo	98	0.245	ug/L	0.016	6	298	1703	5
	Y	89		ug/L			246203	250369	5
	Kr	83		ug/L			174	160	1
[>	In	115		ug/L			260797	262715	5
[	Ag	107	U 0.001	ug/L	0.001	69	39	50	13
[	Cd	111	U 0.003	ug/L	0.001	44	144	151	7
[	Cd	114	0.002	ug/L	0.001	50	18	27	10
[	Sb	121	U 0.170	ug/L	0.008	4	136	1619	6
[	Sb	123	0.158	ug/L	0.012	7	117	1179	6
[	Ba	135	7.718	ug/L	0.267	3	25	14622	3
[	Ba	137	7.589	ug/L	0.295	3	52	25214	2
[>	Tb	159		ug/L			324505	331477	6
[	Tl	205	U 0.003	ug/L	0.000	12	40	98	1
[	Pb	208	U 0.097	ug/L	0.001	0	384	3392	6
[	Bi	209		ug/L			267172	269143	6
[	Th	232	0.015	ug/L	0.001	4	145	712	8
[	U	238	0.015	ug/L	0.000	2	41	640	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 18:09:26
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

RR Cr, Mn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	276763	0
[	Be	9	U -0.007	ug/L	0.004	55	7	6	21
	C	13		mg/L			3587	5259	1
	Cl	37		mg/L			2863468	3172305	0
[>	Sc	45		ug/L			195484	232094	3
[	V	51	0.486	ug/L	0.020	4	1040	6314	0
[	V-1	51	0.400	ug/L	0.027	6	3029	7846	0
[	Cr	52	0.188	ug/L	0.023	12	3579	5995	0
[	Cr	53	-0.061	ug/L	0.043	71	1040	1167	1
[	Mn	55	13.554	ug/L	0.259	1	730	204969	1
[	Co	59	0.033	ug/L	0.003	8	99	491	6
[>	Ge	72		ug/L			272490	300566	1
[	Ni	60	0.759	ug/L	0.018	2	85	1861	2
[	Ni	62	0.593	ug/L	0.011	1	50	263	1
[	Cu	63	1.183	ug/L	0.011	0	308	6715	2
[	Cu	65	1.189	ug/L	0.017	1	120	3157	1
[	Zn	66	U 1.863	ug/L	0.070	3	338	3498	3
[	Zn	67	1.809	ug/L	0.133	7	126	652	6
[	Zn	68	1.296	ug/L	0.017	1	5436	7528	1
[	As	75	0.828	ug/L	0.015	1	318	1898	1
[	As-1	75	0.475	ug/L	0.027	5	6563	8112	0
[	Se	82	U 0.144	ug/L	0.085	59	-17	4	293
[	Se	78	-1.695	ug/L	0.131	7	6620	6616	0
[	Mo	98	0.205	ug/L	0.005	2	298	1603	1
	Y	89		ug/L			246203	276901	1
	Kr	83		ug/L			174	162	6
[>	In	115		ug/L			260797	288100	2
[	Ag	107	U 0.003	ug/L	0.001	36	39	70	12
[	Cd	111	U 0.004	ug/L	0.007	186	144	168	11
[	Cd	114	0.003	ug/L	0.000	4	18	36	0
[	Sb	121	U 0.108	ug/L	0.002	2	136	1184	0
[	Sb	123	0.108	ug/L	0.005	4	117	921	4
[	Ba	135	5.945	ug/L	0.083	1	25	12373	2
[	Ba	137	5.801	ug/L	0.081	1	52	21177	1
[>	Tb	159		ug/L			324505	362451	0
[	Tl	205	U 0.003	ug/L	0.000	14	40	122	9
[	Pb	208	U 0.081	ug/L	0.002	2	384	3177	1
[	Bi	209		ug/L			267172	303042	0
[	Th	232	0.008	ug/L	0.001	10	145	480	6
[	U	238	0.013	ug/L	0.001	5	41	622	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 J REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, November 29, 2012 18:15:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	254965	0
[	Be	9	0.075	ug/L	0.029	39	7	35	30
	C	13		mg/L			3587	7546	2
	Cl	37		mg/L			2863468	6484585	2
[>	Sc	45		ug/L			195484	323353	2
[	V	51	87.440	ug/L	2.260	2	1040	1276270	2
[	V-1	51	86.733	ug/L	2.131	2	3029	1291018	1
[	Cr	52	7.465	ug/L	0.330	4	3579	102483	3
[	Cr	53	9.450	ug/L	0.170	1	1040	16297	3
[	Mn	55	441.686	ug/L	21.366	4	730	9267408	3
[	Co	59	0.301	ug/L	0.011	3	99	4975	3
[>	Ge	72		ug/L			272490	305282	2
[	Ni	60	1.647	ug/L	0.052	3	85	3991	3
[	Ni	62	2.585	ug/L	0.032	1	50	975	3
[	Cu	63	2.518	ug/L	0.047	1	308	14126	0
[	Cu	65	0.656	ug/L	0.020	2	120	1831	3
[	Zn	66	1.820	ug/L	0.023	1	338	3481	3
[	Zn	67	12.859	ug/L	0.245	1	126	3839	3
[	Zn	68	1.746	ug/L	0.121	6	5436	8183	1
[	As	75	0.720	ug/L	0.026	3	318	1722	3
[	As-1	75	0.287	ug/L	0.094	32	6563	7886	0
[	Se	82	0.946	ug/L	0.134	14	-17	143	18
[	Se	78	-1.007	ug/L	0.354	35	6620	7000	0
[	Mo	98	0.421	ug/L	0.004	0	298	2994	2
	Y	89		ug/L			246203	392395	2
	Kr	83		ug/L			174	194	3
[>	In	115		ug/L			260797	292541	3
[	Ag	107	0.039	ug/L	0.004	10	39	437	11
[	Cd	111	0.036	ug/L	0.037	105	144	252	38
[	Cd	114	0.002	ug/L	0.003	153	18	33	57
[	Sb	121	0.054	ug/L	0.001	1	136	681	4
[	Sb	123	0.053	ug/L	0.004	7	117	524	2
[	Ba	135	13.503	ug/L	0.489	3	25	28476	1
[	Ba	137	13.269	ug/L	0.551	4	52	49068	0
[>	Tb	159		ug/L			324505	362095	2
[	Tl	205	0.001	ug/L	0.000	28	40	78	14
[	Pb	208	0.119	ug/L	0.003	2	384	4450	2
[	Bi	209		ug/L			267172	274493	0
[	Th	232	0.134	ug/L	0.008	5	145	5506	3
[	U	238	0.050	ug/L	0.001	1	41	2252	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR65 B SWN
Sample Dil Factor: 20 Del
Comments:
Sample Date/Time: Thursday, November 29, 2012 18:21:59
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

RR x50
Ag, Cd, Sb

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	287774	1
[	Be	9	0.052	ug/L	0.013	25	7	30	17
	C	13		mg/L			3587	4158	2
	Cl	37		mg/L			2863468	3425526	0
[>	Sc	45		ug/L			195484	292928	2
[	V	51	41.002	ug/L	0.775	1	1040	542916	0
[	V-1	51	40.476	ug/L	0.744	1	3029	548144	0
[	Cr	52	6.956	ug/L	0.117	1	3579	86875	2
[	Cr	53	7.107	ug/L	0.136	1	1040	11488	3
[	Mn	55	148.255	ug/L	2.218	1	730	2819186	1
[	Co	59	0.694	ug/L	0.011	1	99	10192	3
[>	Ge	72		ug/L			272490	340473	1
[	Ni	60	1.473	ug/L	0.034	2	85	3991	2
[	Ni	62	6.523	ug/L	0.346	5	50	2649	5
[	Cu	63	177.604	ug/L	0.732	0	308	1084630	1
[	Cu	65	178.494	ug/L	1.094	0	120	514709	1
[	Zn	66	124.287	ug/L	2.353	1	338	236616	1
[	Zn	67	120.208	ug/L	1.074	0	126	38709	2
[	Zn	68	125.383	ug/L	0.793	0	5436	174510	1
[	As	75	0.833	ug/L	0.025	3	318	2160	2
[	As-1	75	0.175	ug/L	0.047	26	6563	8565	1
[	Se	82	9.194	ug/L	0.122	1	-17	1749	1
[	Se	78	6.562	ug/L	0.223	3	6620	11279	1
[	Mo	98	14.891	ug/L	0.298	1	298	105394	3
	Y	89		ug/L			246203	320964	2
	Kr	83		ug/L			174	179	4
[>	In	115		ug/L			260797	386964	0
[	Ag	107	2.037	ug/L	0.007	0	39	27096	1
[	Cd	111	0.066	ug/L	0.002	3	144	435	2
[	Cd	114	0.079	ug/L	0.006	6	18	632	6
[	Sb	121	0.001	ug/L	0.001	92	136	213	4
[	Sb	123	-0.005	ug/L	0.000	8	117	122	3
[	Ba	135	191.852	ug/L	1.661	0	25	535106	1
[	Ba	137	187.794	ug/L	1.659	0	52	918537	1
[>	Tb	159		ug/L			324505	394276	1
[	Tl	205	0.743	ug/L	0.024	3	40	20000	2
[	Pb	208	33.466	ug/L	0.590	1	384	1232375	1
[	Bi	209		ug/L			267172	400078	0
[	Th	232	0.436	ug/L	0.005	1	145	19065	1
[	U	238	0.205	ug/L	0.003	1	41	9932	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, November 29, 2012 18:28:19
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	277885	2
[	Be	9	51.041	ug/L	0.881	1	7	19897	2
	C	13		mg/L			3587	2526	1
	Cl	37		mg/L			2863468	3451103	0
[>	Sc	45		ug/L			195484	244727	1
[	V	51	50.029	ug/L	1.046	2	1040	553193	0
[	V-1	51	50.255	ug/L	1.043	2	3029	567725	0
[	Cr	52	49.236	ug/L	0.825	1	3579	486491	0
[	Cr	53	49.974	ug/L	0.760	1	1040	59620	0
[	Mn	55	49.343	ug/L	1.112	2	730	784492	0
[	Co	59	50.104	ug/L	0.779	1	99	605684	1
[>	Ge	72		ug/L			272490	323998	1
[	Ni	60	51.117	ug/L	0.596	1	85	128399	1
[	Ni	62	51.434	ug/L	0.885	1	50	19467	1
[	Cu	63	50.323	ug/L	1.083	2	308	292632	0
[	Cu	65	51.015	ug/L	1.017	1	120	140060	0
[	Zn	66	50.854	ug/L	0.946	1	338	92355	0
[	Zn	67	50.610	ug/L	1.536	3	126	15588	1
[	Zn	68	50.349	ug/L	0.906	1	5436	70545	1
[	As	75	49.946	ug/L	0.614	1	318	100861	0
[	As-1	75	49.418	ug/L	0.532	1	6563	105780	1
[	Se	82	51.019	ug/L	0.770	1	-17	9330	0
[	Se	78	48.530	ug/L	0.570	1	6620	29041	1
[	Mo	98	50.730	ug/L	1.240	2	298	340672	1
	Y	89		ug/L			246203	296861	0
	Kr	83		ug/L			174	175	2
[>	In	115		ug/L			260797	312918	1
[	Ag	107	50.454	ug/L	0.310	0	39	541455	0
[	Cd	111	49.764	ug/L	0.684	1	144	135244	0
[	Cd	114	49.690	ug/L	0.988	1	18	307026	2
[	Sb	121	49.197	ug/L	0.608	1	136	511745	0
[	Sb	123	49.047	ug/L	0.430	0	117	392024	0
[	Ba	135	49.145	ug/L	0.423	0	25	110862	1
[	Ba	137	48.625	ug/L	0.616	1	52	192366	1
[>	Tb	159		ug/L			324505	381978	1
[	Tl	205	49.273	ug/L	0.370	0	40	1282827	2
[	Pb	208	48.939	ug/L	0.428	0	384	1745816	0
[	Bi	209		ug/L			267172	299954	1
[	Th	232	49.011	ug/L	1.262	2	145	2060033	3
[	U	238	48.454	ug/L	0.849	1	41	2263085	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, November 29, 2012 18:34:57
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\112912.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			238098	274144	0
[	Be	9	-0.007	ug/L	0.007	89	7	6	40
	C	13		mg/L			3587	3092	1
	Cl	37		mg/L			2863468	3411046	0
[>	Sc	45		ug/L			195484	238418	1
|	V	51	-0.017	ug/L	0.009	55	1040	1091	10
|	V-1	51	0.027	ug/L	0.012	43	3029	3990	4
|	Cr	52	-0.047	ug/L	0.005	9	3579	3916	2
|	Cr	53	0.088	ug/L	0.016	17	1040	1369	2
|	Mn	55	-0.022	ug/L	0.001	2	730	555	2
[	Co	59	-0.005	ug/L	0.000	7	99	65	8
[>	Ge	72		ug/L			272490	313719	0
|	Ni	60	-0.011	ug/L	0.006	54	85	70	21
|	Ni	62	0.035	ug/L	0.033	95	50	70	17
|	Cu	63	0.003	ug/L	0.002	67	308	370	2
|	Cu	65	-0.004	ug/L	0.002	49	120	127	4
|	Zn	66	0.001	ug/L	0.009	1738	338	390	4
|	Zn	67	0.004	ug/L	0.033	782	126	147	6
|	Zn	68	-0.574	ug/L	0.022	3	5436	5551	1
|	As	75	-0.026	ug/L	0.015	57	318	316	9
|	As-1	75	-0.316	ug/L	0.044	13	6563	6949	0
|	Se	82	0.081	ug/L	0.040	48	-17	-5	119
|	Se	78	-1.444	ug/L	0.214	14	6620	7011	0
[	Mo	98	-0.042	ug/L	0.001	1	298	73	5
	Y	89		ug/L			246203	291036	0
	Kr	83		ug/L			174	164	2
[>	In	115		ug/L			260797	309101	0
|	Ag	107	0.004	ug/L	0.003	75	39	85	34
|	Cd	111	-0.000	ug/L	0.005	1312	144	169	6
|	Cd	114	-0.001	ug/L	0.001	58	18	15	23
|	Sb	121	0.018	ug/L	0.009	52	136	347	27
|	Sb	123	0.015	ug/L	0.008	53	117	254	24
|	Ba	135	0.009	ug/L	0.003	37	25	51	15
[	Ba	137	0.002	ug/L	0.001	67	52	70	6
[>	Tb	159		ug/L			324505	369808	0
|	Tl	205	0.004	ug/L	0.001	28	40	145	20
|	Pb	208	0.002	ug/L	0.002	89	384	505	12
|	Bi	209		ug/L			267172	301752	1
|	Th	232	0.030	ug/L	0.007	21	145	1396	20
[	U	238	0.001	ug/L	0.000	27	41	93	14

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 11-30-12 **Analyst:** QC **Page:** 1 of 5

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD 0			2994-2
		-1			2993-4
		-2			-5
		-3			2995-11
		-4			2993-6
		Rinse Sample			
		ICV			2995-7
		ICB			
		CCV1			
		CCB1			As2, Se[78] high
		Low Check			
		ICSA			
		ICSAB			
		LR200			
		LR300			
		CCV2			
		CCB2			Cr[53], As2, Se[78] high
		VBGMB1	REN	2	
		MB2			Cu = 0.948 ppb
		MB3			
		MB1SPK			✓
		MB2SPK			✓
		MB3SPK		✓	✓
		VUR63Q	RHN	10	

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 1-30-12 **Analyst:** QC **Page:** 2 of 5

All corrections made by analyst unless otherwise noted. QC 1-23-12

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		V555 A	REN	2	
		V564 A	↓	20	
		V566 A	↓	2	RR Cr, Mn, Zn x10
		CCV3			
		CCB3			
		V514 ADup	REN	20	√Cr
		A	↓	↓	↓
		A Spk		↓	
		B			
		D			
	✓	H	↓	↓	↓
		V566 B	REN	2	RR Ni, Cu
✓		VR63	RHN	10	✱
		VR63 T	↓	20	✱
		↓ W	↓	↓	
		CCV4			Be, Ni, Cu, High Th, U La
		CCB4			Cr53, Mn 2.5e7 high
	✓	VR80 MB Spk	REN	2	RR Be
		V536 C	↓	10	
		V544 A		50	
		VR80 ADup		10	✓ RR Be, Cu, Ni
		A	↓	↓	↓
		A Spk		↓	✓
		B	↓	↓	↓

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Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 11-30-12 **Analyst:** QV **Page:** 3 **of** 5

All corrections made by analyst unless otherwise noted. QV 12-3-12

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		VQ39 A	RHW	10	
	✓	VT20 A	REN	20	
		VR65 B	SWN	50	
		CCV5			Be, Ni^{60}, Cu^{63} high Th low
		CCB5			As, Se^{78} high
		VS14 J	REN	10	
		VR63 ADup	RHW	20 ✓	
		A			
		ASpk			Mn too STL
		MDup			✓
		M			
		MSpk		↓	Mn STL
		N	↓	50	
		VS66 D	REN	2	RR Cu, Ni
		↓ F	↓	↓	
		CCV6			Be, Ni, Cu high Li low
		CCB6			Cu^{63}, Se^{78} high Ag Li low
		VS49 MB1	REN	2	RR Be, Cu, Ni
		↓ MB1SPK			↓
		VS66 I+			RR Cu, Ni, As, Zn Ge low
		IDup			RR Cu, Ni Mn x5
		I			RR Cu, Ni Mn x5
		ISpk			↓
		J	↓	↓	RR Cu, Ni

ATA-442

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ~~ICP-MS~~ GFA CVA

Analysis Date: 11-30-12

Elan	Analyst EJ 12/4/12	Peer HA 11-4	Comment
Logbook			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification			
ICV/CCV	✓	✓	See log
ICB/CCB	✓	✓	See log
Samples			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	See log
Carry-over	✓	✓	
Method QC			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes	—	—	
Matrix QC			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	See log - CAF J566
Data Distribution			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	J566

/ S1

Instrument Tuning Report

File Name: Default.tun
File Path: C:\Elandata\Tuning\Default.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	9.077	2035	2158	0.672	
Mg	23.985	23.979	5658	2265	0.667	
Co	58.933	58.878	14152	2532	0.690	
In	114.904	114.879	27797	2979	0.695	
Pb	207.977	208.025	50457	3725	0.684	

2nd

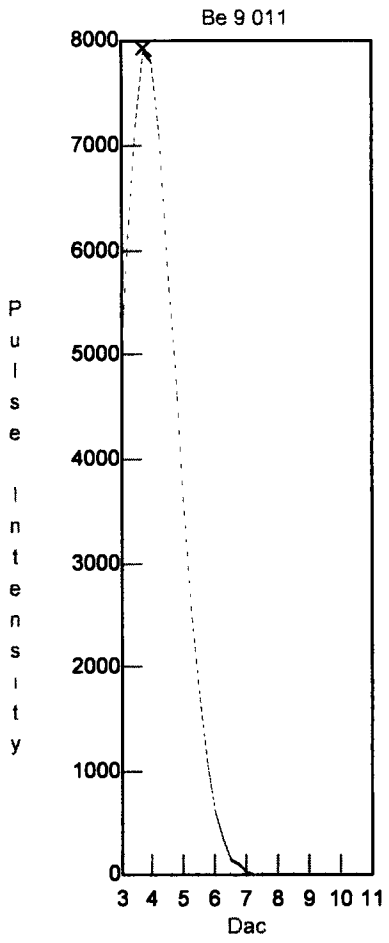
Instrument Tuning Report

File Name: Default.tun
File Path: C:\Elandata\Tuning\Default.tun

Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	9.027	2038	2158	0.677	
Mg	23.985	24.029	5668	2265	0.683	
Co	58.933	58.979	14162	2532	0.676	
In	114.904	114.928	27802	2979	0.679	
Pb	207.977	207.926	50444	3725	0.682	

VPRO : 0111R

H-2 11-30-12
ea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Pulse Intensity
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6000
5000
4000
3000
2000
1000
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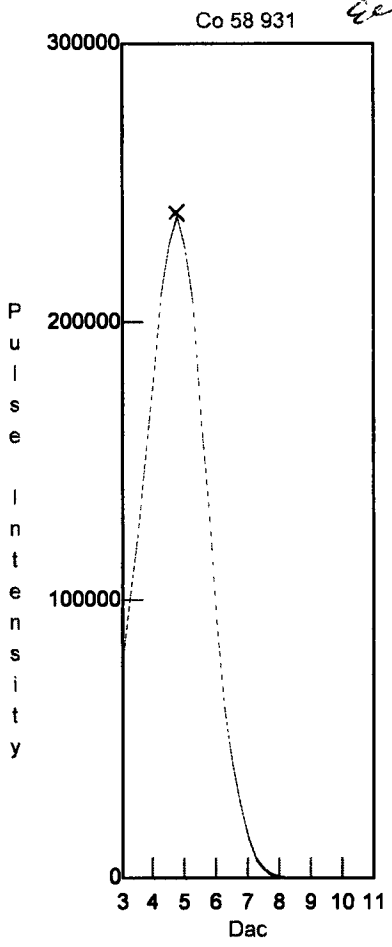
Dac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Pulse Intensity
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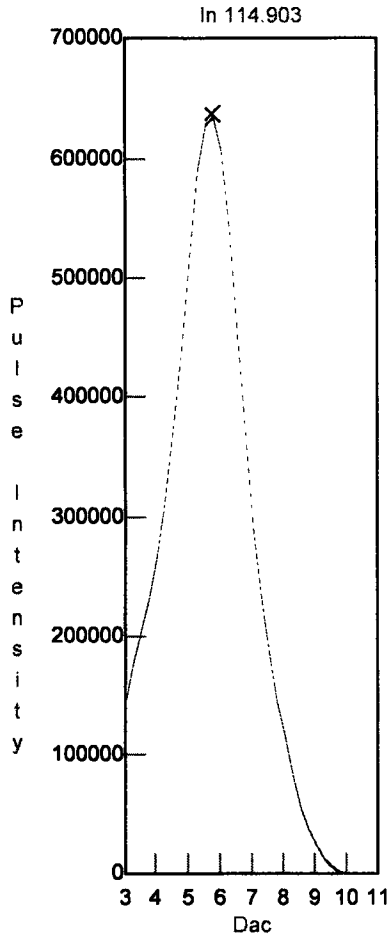
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac


In 114.903
Pulse Intensity
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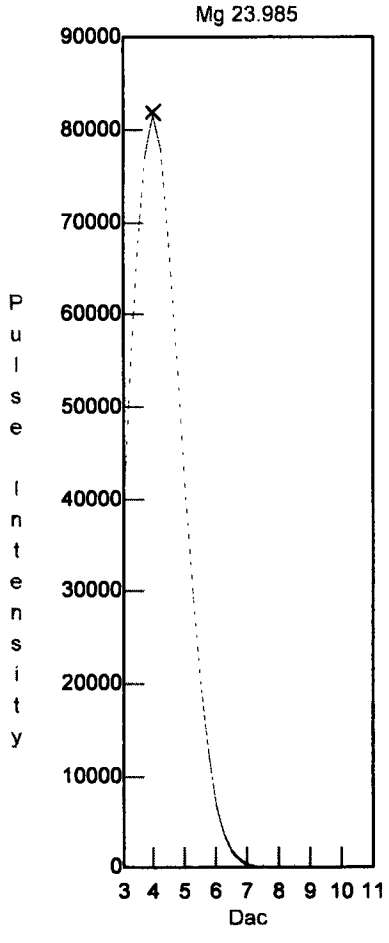
Dac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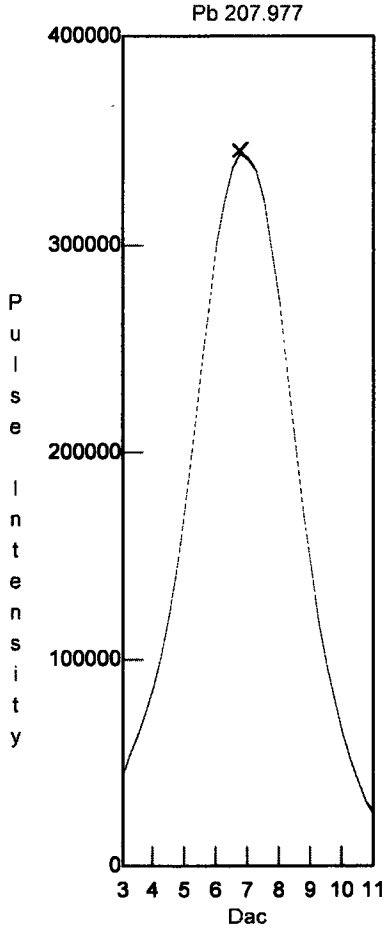
Dac


Pb 207.977
Pulse Intensity
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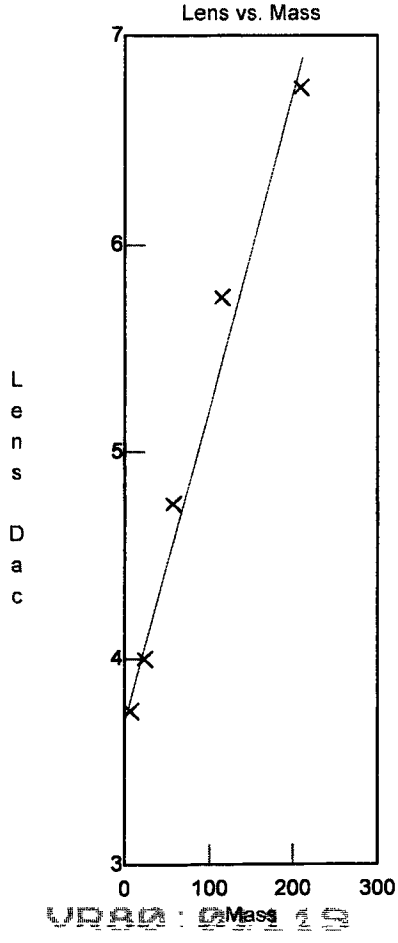
300000
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac


Lens vs. Mass
Lens Dac
7
6
5
4
3
0
100
200
300
Mass

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Friday, November 30, 2012 09:57:32
Sample Description:
Sample File: C:\Elandata\Sample\1119.sam
Method File: C:\Elandata\Method\aridailyperf.mth
Dataset File: C:\Elandata\Dataset\daily performance\Sample.1210
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\Default.dac
Number of Replicates: 5
Dual Detector Mode: Dual

0.83

Summary

	Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24	43595.955	1285.438	2.949
	In	115	342513.876	8876.702	2.592
	Pb	208	191329.115	4256.227	2.225
⌈>	Ba	138	277626.195	5846.815	2.106
⌊	Ba++	69	0.014	0.000	1.112
⌈>	Ce	140	346326.463	7312.830	2.112
⌊	CeO	156	0.029	0.000	1.472
	Bkgd	220	14.501	1.677	11.566

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 10:23:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				258961	0
	Be	9		ug/L				7	36
	C	13		mg/L				3609	1
	Cl	37		mg/L				2916004	0
>	Sc	45		ug/L				282777	1
	V	51		ug/L				1730	3
	V-1	51		ug/L				3780	6
	Cr	52		ug/L				5667	2
	Cr	53		ug/L				1296	4
	Mn	55		ug/L				420	5
	Co	59		ug/L				50	10
>	Ge	72		ug/L				391184	0
	Ni	60		ug/L				80	0
	Ni	62		ug/L				54	23
	Cu	63		ug/L				200	8
	Cu	65		ug/L				107	19
	Zn	66		ug/L				422	9
	Zn	67		ug/L				147	13
	Zn	68		ug/L				6276	1
	As	75		ug/L				220	4
	As-1	75		ug/L				9042	0
	Se	82		ug/L				-8	109
	Se	78		ug/L				9216	0
	Mo	98		ug/L				470	27
	Y	89		ug/L				364750	1
	Kr	83		ug/L				176	4
>	In	115		ug/L				360532	1
	Ag	107		ug/L				25	5
	Cd	111		ug/L				178	3
	Cd	114		ug/L				13	10
	Sb	121		ug/L				25	23
	Sb	123		ug/L				18	5
	Ba	135		ug/L				36	9
	Ba	137		ug/L				58	18
>	Tb	159		ug/L				438956	2
	Tl	205		ug/L				51	22
	Pb	208		ug/L				402	4
	Bi	209		ug/L				320054	1
	Th	232		ug/L				58	11
	U	238		ug/L				29	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 10:29:51
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	257047	1
[	Be	9	10.000	ug/L	0.274	2	7	3614	0
	C	13		mg/L			3609	3769	3
	Cl	37		mg/L			2916004	2946600	0
[>	Sc	45		ug/L			282777	284074	0
[	V	51	10.000	ug/L	0.070	0	1730	128918	0
[	V-1	51	10.000	ug/L	0.108	1	3780	133011	0
[	Cr	52	10.000	ug/L	0.124	1	5667	119259	0
[	Cr	53	10.000	ug/L	0.184	1	1296	14785	1
[	Mn	55	10.000	ug/L	0.235	2	420	181227	1
[	Co	59	10.000	ug/L	0.205	2	50	144679	1
[>	Ge	72		ug/L			391184	395979	1
[	Ni	60	10.000	ug/L	0.187	1	80	31383	0
[	Ni	62	10.000	ug/L	0.218	2	54	4768	0
[	Cu	63	10.000	ug/L	0.161	1	200	70950	0
[	Cu	65	10.000	ug/L	0.204	2	107	34068	1
[	Zn	66	10.000	ug/L	0.070	0	422	20805	1
[	Zn	67	10.000	ug/L	0.265	2	147	3596	2
[	Zn	68	10.000	ug/L	0.134	1	6276	20866	0
[	As	75	10.000	ug/L	0.113	1	220	24386	0
[	As-1	75	10.000	ug/L	0.157	1	9042	32728	0
[	Se	82	10.000	ug/L	0.222	2	-8	2376	0
[	Se	78	10.000	ug/L	0.421	4	9216	14785	0
[	Mo	98	10.000	ug/L	0.154	1	470	80849	0
	Y	89		ug/L			364750	364044	1
	Kr	83		ug/L			176	172	1
[>	In	115		ug/L			360532	363366	0
[	Ag	107	10.000	ug/L	0.066	0	25	126413	0
[	Cd	111	10.000	ug/L	0.175	1	178	30816	1
[	Cd	114	10.000	ug/L	0.135	1	13	70842	0
[	Sb	121	10.000	ug/L	0.181	1	25	113501	1
[	Sb	123	10.000	ug/L	0.136	1	18	86380	1
[	Ba	135	10.000	ug/L	0.081	0	36	26294	1
[	Ba	137	10.000	ug/L	0.080	0	58	45723	0
[>	Tb	159		ug/L			438956	446171	1
[	Tl	205	10.000	ug/L	0.123	1	51	270902	1
[	Pb	208	10.000	ug/L	0.137	1	402	369534	1
[	Bi	209		ug/L			320054	316392	2
[	Th	232	10.000	ug/L	0.111	1	58	413908	0
[	U	238	10.000	ug/L	0.213	2	29	439409	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 10:35:59
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	254347	1
[	Be	9	20.074	ug/L	0.141	0	7	7282	1
	C	13		mg/L			3609	3642	0
	Cl	37		mg/L			2916004	3021350	0
[>	Sc	45		ug/L			282777	283734	1
[	V	51	20.080	ug/L	0.244	1	1730	260942	1
[	V-1	51	20.083	ug/L	0.243	1	3780	267368	2
[	Cr	52	20.023	ug/L	0.120	0	5667	233852	0
[	Cr	53	20.036	ug/L	0.066	0	1296	28480	1
[	Mn	55	19.991	ug/L	0.158	0	420	360835	0
[	Co	59	20.022	ug/L	0.432	2	50	290596	2
[>	Ge	72		ug/L			391184	387684	1
[	Ni	60	20.133	ug/L	0.156	0	80	63471	0
[	Ni	62	20.096	ug/L	0.088	0	54	9510	1
[	Cu	63	20.041	ug/L	0.205	1	200	140205	2
[	Cu	65	20.057	ug/L	0.481	2	107	67561	1
[	Zn	66	20.161	ug/L	0.341	1	422	41970	1
[	Zn	67	20.131	ug/L	0.409	2	147	7124	2
[	Zn	68	20.160	ug/L	0.337	1	6276	35811	1
[	As	75	20.051	ug/L	0.173	0	220	48143	1
[	As-1	75	20.085	ug/L	0.189	0	9042	56127	0
[	Se	82	19.991	ug/L	0.244	1	-8	4651	0
[	Se	78	20.152	ug/L	0.600	2	9216	20239	0
[	Mo	98	20.122	ug/L	0.157	0	470	162809	1
	Y	89		ug/L			364750	362721	1
	Kr	83		ug/L			176	185	1
[>	In	115		ug/L			360532	361475	0
[	Ag	107	20.027	ug/L	0.266	1	25	253219	1
[	Cd	111	20.075	ug/L	0.061	0	178	62300	0
[	Cd	114	19.992	ug/L	0.222	1	13	140660	0
[	Sb	121	19.982	ug/L	0.122	0	25	224777	1
[	Sb	123	20.031	ug/L	0.229	1	18	173191	0
[	Ba	135	20.036	ug/L	0.114	0	36	52754	1
[	Ba	137	20.006	ug/L	0.123	0	58	91050	1
[>	Tb	159		ug/L			438956	441178	0
[	Tl	205	19.991	ug/L	0.289	1	51	534475	1
[	Pb	208	19.999	ug/L	0.187	0	402	730284	0
[	Bi	209		ug/L			320054	309501	1
[	Th	232	20.020	ug/L	0.292	1	58	822609	1
[	U	238	20.034	ug/L	0.372	1	29	876202	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 10:42:08
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	249776	1
[	Be	9	50.059	ug/L	0.424	0	7	17931	2
	C	13		mg/L			3609	2558	3
	Cl	37		mg/L			2916004	3092532	1
[>	Sc	45		ug/L			282777	288766	4
[	V	51	49.805	ug/L	1.530	3	1730	642921	1
[	V-1	51	49.820	ug/L	1.307	2	3780	657003	2
[	Cr	52	49.717	ug/L	1.069	2	5667	566141	2
[	Cr	53	49.770	ug/L	0.659	1	1296	68477	4
[	Mn	55	49.782	ug/L	1.814	3	420	893597	3
[	Co	59	49.651	ug/L	1.433	2	50	708414	4
[>	Ge	72		ug/L			391184	381113	2
[	Ni	60	49.790	ug/L	0.456	0	80	151031	2
[	Ni	62	49.803	ug/L	0.478	0	54	22644	2
[	Cu	63	49.948	ug/L	0.271	0	200	341412	2
[	Cu	65	49.938	ug/L	0.823	1	107	164171	1
[	Zn	66	49.941	ug/L	0.310	0	422	101012	2
[	Zn	67	50.093	ug/L	0.629	1	147	17372	2
[	Zn	68	50.006	ug/L	0.717	1	6276	78309	1
[	As	75	49.916	ug/L	0.228	0	220	116526	2
[	As-1	75	49.925	ug/L	0.257	0	9042	123205	2
[	Se	82	49.814	ug/L	0.569	1	-8	11199	1
[	Se	78	49.841	ug/L	0.674	1	9216	35562	2
[	Mo	98	50.048	ug/L	0.499	0	470	399343	3
	Y	89		ug/L			364750	359192	2
	Kr	83		ug/L			176	181	3
[>	In	115		ug/L			360532	353972	2
[	Ag	107	50.077	ug/L	0.144	0	25	624741	2
[	Cd	111	50.048	ug/L	0.192	0	178	152567	2
[	Cd	114	50.094	ug/L	0.220	0	13	348401	2
[	Sb	121	50.057	ug/L	0.907	1	25	554388	0
[	Sb	123	50.052	ug/L	0.459	0	18	425970	2
[	Ba	135	49.941	ug/L	0.834	1	36	127933	2
[	Ba	137	50.030	ug/L	0.747	1	58	223506	1
[>	Tb	159		ug/L			438956	429982	1
[	Tl	205	50.013	ug/L	0.634	1	51	1304940	1
[	Pb	208	49.843	ug/L	0.228	0	402	1745776	1
[	Bi	209		ug/L			320054	304490	0
[	Th	232	50.109	ug/L	1.788	3	58	2029222	4
[	U	238	49.982	ug/L	0.992	1	29	2126705	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 10:48:16
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	244321	4
[	Be	9	100.930	ug/L	3.125	3	7	36453	1
	C	13		mg/L			3609	3637	4
	Cl	37		mg/L			2916004	3335195	1
[>	Sc	45		ug/L			282777	305455	2
|	V	51	99.967	ug/L	0.289	0	1730	1362918	2
|	V-1	51	99.996	ug/L	0.657	0	3780	1391702	2
|	Cr	52	100.048	ug/L	2.576	2	5667	1201021	0
|	Cr	53	100.133	ug/L	2.372	2	1296	144920	1
|	Mn	55	99.695	ug/L	2.075	2	420	1874404	0
[	Co	59	99.584	ug/L	2.893	2	50	1482143	1
[>	Ge	72		ug/L			391184	386606	2
|	Ni	60	100.195	ug/L	2.200	2	80	310146	0
|	Ni	62	100.407	ug/L	1.696	1	54	46885	0
|	Cu	63	100.184	ug/L	0.696	0	200	698728	1
|	Cu	65	100.021	ug/L	1.389	1	107	333702	1
|	Zn	66	100.170	ug/L	0.467	0	422	206258	2
|	Zn	67	100.327	ug/L	1.037	1	147	35538	2
|	Zn	68	100.341	ug/L	1.293	1	6276	154861	2
|	As	75	100.103	ug/L	0.426	0	220	237652	2
|	As-1	75	100.085	ug/L	0.285	0	9042	242226	2
|	Se	82	100.296	ug/L	1.691	1	-8	23113	2
|	Se	78	100.234	ug/L	1.881	1	9216	63756	0
[	Mo	98	100.507	ug/L	1.344	1	470	826959	3
	Y	89		ug/L			364750	361295	1
	Kr	83		ug/L			176	195	6
[>	In	115		ug/L			360532	362697	1
|	Ag	107	99.877	ug/L	1.003	1	25	1271653	2
|	Cd	111	100.180	ug/L	0.941	0	178	314662	2
|	Cd	114	100.233	ug/L	0.371	0	13	719900	1
|	Sb	121	100.476	ug/L	1.794	1	25	1158745	0
|	Sb	123	100.467	ug/L	1.277	1	18	889845	0
|	Ba	135	100.435	ug/L	1.740	1	36	267457	0
[	Ba	137	100.260	ug/L	1.757	1	58	462958	2
[>	Tb	159		ug/L			438956	445304	0
|	Tl	205	100.034	ug/L	1.234	1	51	2706020	1
|	Pb	208	99.644	ug/L	1.451	1	402	3571617	1
|	Bi	209		ug/L			320054	304006	2
|	Th	232	99.950	ug/L	2.650	2	58	4183630	2
[	U	238	99.843	ug/L	3.240	3	29	4377080	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse Sample
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 10:54:54
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	221135	4
[	Be	9	0.009	ug/L	0.014	148	7	9	51
	C	13		mg/L			3609	3399	1
	Cl	37		mg/L			2916004	3290446	1
[>	Sc	45		ug/L			282777	275343	3
|	V	51	0.009	ug/L	0.008	93	1730	1793	7
|	V-1	51	0.034	ug/L	0.009	25	3780	4104	0
|	Cr	52	0.022	ug/L	0.018	82	5667	5747	0
|	Cr	53	0.099	ug/L	0.055	55	1296	1388	2
|	Mn	55	0.001	ug/L	0.002	301	420	421	11
[	Co	59	0.000	ug/L	0.001	120	50	54	16
[>	Ge	72		ug/L			391184	353130	4
|	Ni	60	0.003	ug/L	0.002	85	80	80	7
|	Ni	62	0.010	ug/L	0.015	148	54	53	13
|	Cu	63	0.007	ug/L	0.003	40	200	222	3
|	Cu	65	0.005	ug/L	0.002	43	107	113	8
|	Zn	66	0.020	ug/L	0.004	19	422	420	6
|	Zn	67	0.076	ug/L	0.020	25	147	157	2
|	Zn	68	0.763	ug/L	0.167	21	6276	6691	1
|	As	75	0.033	ug/L	0.024	71	220	269	14
|	As-1	75	0.513	ug/L	0.204	39	9042	9242	0
|	Se	82	-0.002	ug/L	0.044	2254	-8	-8	110
|	Se	78	2.158	ug/L	0.841	38	9216	9381	0
[	Mo	98	-0.032	ug/L	0.002	6	470	187	10
	Y	89		ug/L			364750	323223	5
	Kr	83		ug/L			176	182	3
[>	In	115		ug/L			360532	331891	3
|	Ag	107	0.008	ug/L	0.002	24	25	117	23
|	Cd	111	0.010	ug/L	0.002	21	178	192	4
|	Cd	114	0.002	ug/L	0.001	29	13	24	17
|	Sb	121	0.020	ug/L	0.005	22	25	240	23
|	Sb	123	0.021	ug/L	0.005	23	18	192	25
|	Ba	135	0.002	ug/L	0.001	47	36	37	8
[	Ba	137	0.001	ug/L	0.003	209	58	59	17
[>	Tb	159		ug/L			438956	396725	5
|	Tl	205	0.007	ug/L	0.001	21	51	210	22
|	Pb	208	0.004	ug/L	0.002	50	402	485	13
|	Bi	209		ug/L			320054	275553	3
|	Th	232	0.041	ug/L	0.009	22	58	1577	26
[	U	238	0.002	ug/L	0.000	24	29	95	22

Quantitative Analysis - Calibration Report

Sample Date/Time: Friday, November 30, 2012 10:54:54
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

Analyte	Mass	r Corr Coeff	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	0.9999	0.0015	10	20	50	100	
C	13							
Cl	37							
Sc	45							
V	51	1.0000	0.0446	10	20	50	100	
V-1	51	1.0000	0.0454	10	20	50	100	
Cr	52	1.0000	0.0391	10	20	50	100	
Cr	53	1.0000	0.0047	10	20	50	100	
Mn	55	1.0000	0.0616	10	20	50	100	
Co	59	0.9999	0.0487	10	20	50	100	
Ge	72							
Ni	60	1.0000	0.0080	10	20	50	100	
Ni	62	1.0000	0.0012	10	20	50	100	
Cu	63	1.0000	0.0180	10	20	50	100	
Cu	65	1.0000	0.0086	10	20	50	100	
Zn	66	1.0000	0.0053	10	20	50	100	
Zn	67	1.0000	0.0009	10	20	50	100	
Zn	68	1.0000	0.0038	10	20	50	100	
As	75	1.0000	0.0061	10	20	50	100	
As-1	75	1.0000	0.0060	10	20	50	100	
Se	82	1.0000	0.0006	10	20	50	100	
Se	78	1.0000	0.0014	10	20	50	100	
Mo	98	1.0000	0.0213	10	20	50	100	
Y	89							
Kr	83							
In	115							
Ag	107	1.0000	0.0351	10	20	50	100	
Cd	111	1.0000	0.0087	10	20	50	100	
Cd	114	1.0000	0.0198	10	20	50	100	
Sb	121	1.0000	0.0318	10	20	50	100	
Sb	123	1.0000	0.0244	10	20	50	100	
Ba	135	1.0000	0.0073	10	20	50	100	
Ba	137	1.0000	0.0127	10	20	50	100	
Tb	159							
Tl	205	1.0000	0.0607	10	20	50	100	
Pb	208	1.0000	0.0805	10	20	50	100	
Bi	209							
Th	232	1.0000	0.0940	10	20	50	100	
U	238	1.0000	0.0984	10	20	50	100	

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 11:02:12
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	230275	1
[	Be	9	49.212	ug/L	0.741	1	7	16770	1
	C	13		mg/L			3609	6716	3
	Cl	37		mg/L			2916004	3343548	0
[>	Sc	45		ug/L			282777	286221	2
[	V	51	50.000	ug/L	0.468	0	1730	639558	1
[	V-1	51	49.966	ug/L	0.464	0	3780	653451	1
[	Cr	52	49.788	ug/L	0.597	1	5667	563114	1
[	Cr	53	49.692	ug/L	0.286	0	1296	68074	2
[	Mn	55	49.686	ug/L	0.841	1	420	875920	3
[	Co	59	49.529	ug/L	0.415	0	50	691078	2
[>	Ge	72		ug/L			391184	367878	1
[	Ni	60	50.285	ug/L	0.843	1	80	148190	1
[	Ni	62	49.287	ug/L	1.146	2	54	21932	3
[	Cu	63	50.291	ug/L	0.217	0	200	333897	2
[	Cu	65	50.272	ug/L	0.227	0	107	159687	2
[	Zn	66	49.953	ug/L	0.496	0	422	98070	1
[	Zn	67	49.238	ug/L	0.867	1	147	16669	3
[	Zn	68	49.164	ug/L	0.658	1	6276	75220	2
[	As	75	50.332	ug/L	0.556	1	220	113820	2
[	As-1	75	50.140	ug/L	0.572	1	9042	119729	2
[	Se	82	76.401	ug/L	0.788	1	-8	16755	2
[	Se	78	77.557	ug/L	0.786	1	9216	48916	2
[	Mo	98	48.268	ug/L	0.648	1	470	378073	1
	Y	89		ug/L			364750	342046	2
	Kr	83		ug/L			176	187	3
[>	In	115		ug/L			360532	345720	2
[	Ag	107	49.893	ug/L	0.715	1	25	605325	1
[	Cd	111	48.426	ug/L	0.775	1	178	145076	3
[	Cd	114	48.015	ug/L	0.780	1	13	328771	3
[	Sb	121	48.468	ug/L	1.109	2	25	532792	2
[	Sb	123	48.092	ug/L	0.594	1	18	405977	1
[	Ba	135	49.095	ug/L	1.310	2	36	124594	0
[	Ba	137	48.826	ug/L	0.173	0	58	214937	2
[>	Tb	159		ug/L			438956	418436	1
[	Tl	205	47.973	ug/L	0.297	0	51	1219368	1
[	Pb	208	49.260	ug/L	0.714	1	402	1659649	3
[	Bi	209		ug/L			320054	289129	2
[	Th	232	48.156	ug/L	0.767	1	58	1893982	2
[	U	238	49.718	ug/L	1.094	2	29	2048247	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 11:08:50
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	226854	0
[	Be	9	0.010	ug/L	0.008	75	7	9	27
	C	13		mg/L			3609	3537	1
	Cl	37		mg/L			2916004	3353739	0
[>	Sc	45		ug/L			282777	284192	2
[	V	51	0.008	ug/L	0.010	129	1730	1843	9
[	V-1	51	0.010	ug/L	0.012	115	3780	3928	2
[	Cr	52	0.027	ug/L	0.012	44	5667	5995	1
[	Cr	53	0.032	ug/L	0.070	215	1296	1344	4
[	Mn	55	-0.000	ug/L	0.001	540	420	419	2
[	Co	59	0.000	ug/L	0.000	27	50	55	2
[>	Ge	72		ug/L			391184	362699	1
[	Ni	60	-0.001	ug/L	0.002	166	80	70	11
[	Ni	62	0.017	ug/L	0.004	26	54	57	2
[	Cu	63	0.003	ug/L	0.001	36	200	204	4
[	Cu	65	0.002	ug/L	0.003	184	107	105	10
[	Zn	66	0.004	ug/L	0.013	334	422	399	5
[	Zn	67	-0.002	ug/L	0.034	1370	147	135	6
[	Zn	68	0.555	ug/L	0.112	20	6276	6589	1
[	As	75	0.024	ug/L	0.023	96	220	257	19
[	As-1	75	0.466	ug/L	0.075	16	9042	9401	0
[	Se	82	0.021	ug/L	0.071	344	-8	-3	389
[	Se	78	1.963	ug/L	0.311	15	9216	9547	0
[	Mo	98	-0.040	ug/L	0.001	1	470	131	3
	Y	89		ug/L			364750	334126	1
	Kr	83		ug/L			176	175	4
[>	In	115		ug/L			360532	342917	2
[	Ag	107	0.005	ug/L	0.002	29	25	86	19
[	Cd	111	0.005	ug/L	0.007	134	178	185	13
[	Cd	114	0.001	ug/L	0.001	93	13	18	26
[	Sb	121	0.011	ug/L	0.001	5	25	147	5
[	Sb	123	0.011	ug/L	0.004	35	18	111	28
[	Ba	135	0.004	ug/L	0.003	70	36	45	15
[	Ba	137	0.002	ug/L	0.001	53	58	63	6
[>	Tb	159		ug/L			438956	407798	1
[	Tl	205	0.003	ug/L	0.000	10	51	121	5
[	Pb	208	0.002	ug/L	0.001	60	402	430	6
[	Bi	209		ug/L			320054	285794	0
[	Th	232	0.027	ug/L	0.006	22	58	1074	20
[	U	238	0.001	ug/L	0.000	31	29	71	18

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 11:14:39
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	220225	2
[	Be	9	50.908	ug/L	0.344	0	7	16593	3
	C	13		mg/L			3609	2571	0
	Cl	37		mg/L			2916004	3357738	0
[>	Sc	45		ug/L			282777	277195	2
|	V	51	49.813	ug/L	0.310	0	1730	617127	2
|	V-1	51	49.885	ug/L	0.508	1	3780	631865	2
|	Cr	52	50.090	ug/L	0.335	0	5667	548779	3
|	Cr	53	50.296	ug/L	0.709	1	1296	66725	3
|	Mn	55	49.643	ug/L	0.644	1	420	847687	3
[	Co	59	49.892	ug/L	0.583	1	50	674193	3
[>	Ge	72		ug/L			391184	358097	2
|	Ni	60	50.740	ug/L	0.370	0	80	145575	2
|	Ni	62	50.397	ug/L	0.871	1	54	21830	3
|	Cu	63	50.919	ug/L	0.698	1	200	329109	3
|	Cu	65	50.563	ug/L	0.795	1	107	156347	3
|	Zn	66	50.290	ug/L	0.531	1	422	96122	3
|	Zn	67	49.558	ug/L	1.055	2	147	16332	4
|	Zn	68	50.202	ug/L	0.434	0	6276	74650	3
|	As	75	49.638	ug/L	0.282	0	220	109257	2
|	As-1	75	50.022	ug/L	0.247	0	9042	116277	2
|	Se	82	48.156	ug/L	1.135	2	-8	10278	4
|	Se	78	49.751	ug/L	0.559	1	9216	33568	2
[	Mo	98	49.229	ug/L	0.504	1	470	375431	3
	Y	89		ug/L			364750	331662	4
	Kr	83		ug/L			176	184	0
[>	In	115		ug/L			360532	331350	2
|	Ag	107	49.944	ug/L	0.659	1	25	580860	2
|	Cd	111	50.007	ug/L	0.590	1	178	143584	3
|	Cd	114	49.951	ug/L	0.607	1	13	327826	4
|	Sb	121	50.530	ug/L	0.259	0	25	532448	2
|	Sb	123	50.057	ug/L	0.269	0	18	405088	3
|	Ba	135	50.072	ug/L	0.718	1	36	121872	4
[	Ba	137	49.927	ug/L	0.921	1	58	210696	4
[>	Tb	159		ug/L			438956	404260	4
|	Tl	205	48.571	ug/L	0.610	1	51	1192882	4
|	Pb	208	49.755	ug/L	0.402	0	402	1618967	3
|	Bi	209		ug/L			320054	277653	3
|	Th	232	48.131	ug/L	0.355	0	58	1828921	4
[	U	238	47.531	ug/L	0.589	1	29	1891133	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 11:21:17
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	220059	2
[	Be	9	0.007	ug/L	0.021	296	7	8	82
	C	13		mg/L			3609	3345	2
	Cl	37		mg/L			2916004	3373795	0
[>	Sc	45		ug/L			282777	274181	1
[	V	51	-0.002	ug/L	0.010	535	1730	1655	9
[	V-1	51	0.019	ug/L	0.011	58	3780	3901	2
[	Cr	52	0.024	ug/L	0.009	38	5667	5754	0
[	Cr	53	0.088	ug/L	0.072	81	1296	1368	5
[	Mn	55	-0.002	ug/L	0.002	112	420	380	9
[	Co	59	0.001	ug/L	0.001	166	50	55	22
[>	Ge	72		ug/L			391184	355831	1
[	Ni	60	0.001	ug/L	0.001	109	80	75	1
[	Ni	62	0.036	ug/L	0.018	51	54	64	12
[	Cu	63	0.004	ug/L	0.000	13	200	205	
[	Cu	65	0.011	ug/L	0.006	59	107	130	14
[	Zn	66	0.013	ug/L	0.005	37	422	410	3
[	Zn	67	0.063	ug/L	0.055	87	147	154	10
[	Zn	68	0.618	ug/L	0.133	21	6276	6550	1
[	As	75	0.044	ug/L	0.011	24	220	297	9
[	As-1	75	0.516	ug/L	0.027	5	9042	9331	0
[	Se	82	0.082	ug/L	0.066	81	-8	9	153
[	Se	78	2.169	ug/L	0.143	6	9216	9471	0
[	Mo	98	-0.041	ug/L	0.003	7	470	120	18
	Y	89		ug/L			364750	327631	2
	Kr	83		ug/L			176	175	7
[>	In	115		ug/L			360532	333542	2
[	Ag	107	0.006	ug/L	0.001	18	25	95	16
[	Cd	111	0.004	ug/L	0.003	82	178	175	2
[	Cd	114	0.000	ug/L	0.000	137	13	15	18
[	Sb	121	0.027	ug/L	0.004	14	25	310	16
[	Sb	123	0.029	ug/L	0.005	18	18	255	18
[	Ba	135	0.001	ug/L	0.002	156	36	36	15
[	Ba	137	0.001	ug/L	0.001	108	58	56	6
[>	Tb	159		ug/L			438956	398140	0
[	Tl	205	0.004	ug/L	0.001	14	51	141	10
[	Pb	208	0.003	ug/L	0.000	8	402	458	2
[	Bi	209		ug/L			320054	279283	1
[	Th	232	0.030	ug/L	0.005	17	58	1161	17
[	U	238	0.001	ug/L	0.000	27	29	75	18

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 11:31:05
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	219731	2
[	Be	9	0.194	ug/L	0.018	9	7	69	9
	C	13		mg/L			3609	3079	0
	Cl	37		mg/L			2916004	3378279	0
[>	Sc	45		ug/L			282777	272000	1
[	V	51	0.225	ug/L	0.019	8	1730	4392	3
[	V-1	51	0.239	ug/L	0.019	7	3780	6584	2
[	Cr	52	0.566	ug/L	0.024	4	5667	11468	0
[	Cr	53	0.588	ug/L	0.027	4	1296	1997	0
[	Mn	55	0.514	ug/L	0.011	2	420	9009	0
[	Co	59	0.212	ug/L	0.010	4	50	2858	3
[>	Ge	72		ug/L			391184	358150	0
[	Ni	60	0.528	ug/L	0.019	3	80	1587	3
[	Ni	62	0.521	ug/L	0.031	6	54	274	4
[	Cu	63	0.557	ug/L	0.015	2	200	3779	2
[	Cu	65	0.567	ug/L	0.006	1	107	1851	1
[	Zn	66	4.227	ug/L	0.090	2	422	8435	2
[	Zn	67	3.725	ug/L	0.063	1	147	1352	1
[	Zn	68	4.627	ug/L	0.133	2	6276	12097	1
[	As	75	0.250	ug/L	0.014	5	220	750	4
[	As-1	75	0.709	ug/L	0.018	2	9042	9809	0
[	Se	82	0.524	ug/L	0.064	12	-8	103	13
[	Se	78	2.596	ug/L	0.070	2	9216	9749	0
[	Mo	98	0.158	ug/L	0.003	2	470	1632	1
	Y	89		ug/L			364750	327252	0
	Kr	83		ug/L			176	180	4
[>	In	115		ug/L			360532	333131	0
[	Ag	107	0.207	ug/L	0.005	2	25	2445	3
[	Cd	111	0.106	ug/L	0.008	7	178	470	5
[	Cd	114	0.108	ug/L	0.003	3	13	723	2
[	Sb	121	0.204	ug/L	0.005	2	25	2189	1
[	Sb	123	0.203	ug/L	0.002	0	18	1668	1
[	Ba	135	0.508	ug/L	0.012	2	36	1275	2
[	Ba	137	0.513	ug/L	0.005	1	58	2229	1
[>	Tb	159		ug/L			438956	400818	0
[	Tl	205	0.210	ug/L	0.002	1	51	5167	0
[	Pb	208	0.111	ug/L	0.001	1	402	3955	0
[	Bi	209		ug/L			320054	279265	1
[	Th	232	0.210	ug/L	0.005	2	58	7957	1
[	U	238	0.196	ug/L	0.004	2	29	7762	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 11:36:53
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	234824	0
[	Be	9	0.015	ug/L	0.009	59	7	11	26
	C	13		mg/L			3609	14470	1
	Cl	37		mg/L			2916004	5168349	1
[>	Sc	45		ug/L			282777	276864	0
[	V	51	-0.022	ug/L	0.033	152	1730	1426	28
[	V-1	51	0.887	ug/L	0.081	9	3780	14856	7
[	Cr	52	0.448	ug/L	0.020	4	5667	10397	2
[	Cr	53	3.231	ug/L	0.312	9	1296	5469	7
[	Mn	55	0.104	ug/L	0.004	3	420	2192	3
[	Co	59	0.020	ug/L	0.002	8	50	323	7
[>	Ge	72		ug/L			391184	373518	0
[	Ni	60	0.447	ug/L	0.014	3	80	1415	2
[	Ni	62	3.424	ug/L	0.252	7	54	1594	7
[	Cu	63	0.455	ug/L	0.021	4	200	3256	4
[	Cu	65	0.556	ug/L	0.029	5	107	1894	4
[	Zn	66	1.002	ug/L	0.026	2	422	2394	2
[	Zn	67	1.667	ug/L	0.114	6	147	708	5
[	Zn	68	0.392	ug/L	0.036	9	6276	6553	0
[	As	75	0.106	ug/L	0.006	6	220	453	2
[	As-1	75	0.338	ug/L	0.007	2	9042	9394	0
[	Se	82	-0.023	ug/L	0.024	102	-8	-13	38
[	Se	78	1.121	ug/L	0.044	3	9216	9390	0
[	Mo	98	386.106	ug/L	11.352	2	470	3067892	3
	Y	89		ug/L			364750	347248	0
	Kr	83		ug/L			176	203	1
[>	In	115		ug/L			360532	341498	0
[	Ag	107	0.022	ug/L	0.002	7	25	285	7
[	Cd	111	0.084	ug/L	0.024	27	178	418	16
[	Cd	114	0.706	ug/L	0.027	3	13	4791	4
[	Sb	121	0.066	ug/L	0.003	4	25	738	4
[	Sb	123	0.064	ug/L	0.004	6	18	552	5
[	Ba	135	0.033	ug/L	0.001	3	36	115	2
[	Ba	137	0.030	ug/L	0.003	9	58	184	6
[>	Tb	159		ug/L			438956	422123	0
[	Tl	205	0.029	ug/L	0.000	1	51	799	0
[	Pb	208	0.025	ug/L	0.001	2	402	1230	2
[	Bi	209		ug/L			320054	286850	2
[	Th	232	0.052	ug/L	0.007	14	58	2122	13
[	U	238	0.000	ug/L	0.000	22	29	47	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 11:43:10
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	232647	1
[	Be	9	0.009	ug/L	0.004	40	7	9	15
	C	13		mg/L			3609	14073	0
	Cl	37		mg/L			2916004	4921877	0
[>	Sc	45		ug/L			282777	262723	2
[	V	51	-0.331	ug/L	0.109	33	1730	-2268	57
[	V-1	51	1.091	ug/L	0.061	5	3780	16543	6
[	Cr	52	20.283	ug/L	0.211	1	5667	213720	2
[	Cr	53	23.481	ug/L	0.205	0	1296	30166	3
[	Mn	55	20.213	ug/L	0.402	1	420	327378	3
[	Co	59	20.297	ug/L	0.459	2	50	260051	4
[>	Ge	72		ug/L			391184	361979	2
[	Ni	60	19.551	ug/L	0.090	0	80	56746	2
[	Ni	62	22.343	ug/L	0.651	2	54	9808	3
[	Cu	63	19.473	ug/L	0.082	0	200	127325	2
[	Cu	65	19.767	ug/L	0.163	0	107	61845	2
[	Zn	66	20.220	ug/L	0.235	1	422	39299	3
[	Zn	67	18.415	ug/L	0.316	1	147	6217	1
[	Zn	68	19.150	ug/L	0.135	0	6276	32372	1
[	As	75	19.390	ug/L	0.218	1	220	43256	1
[	As-1	75	20.117	ug/L	0.278	1	9042	52264	1
[	Se	82	0.046	ug/L	0.029	63	-8	1	375
[	Se	78	1.831	ug/L	0.261	14	9216	9460	0
[	Mo	98	383.736	ug/L	4.037	1	470	2954332	1
	Y	89		ug/L			364750	331370	1
	Kr	83		ug/L			176	189	2
[>	In	115		ug/L			360532	327080	2
[	Ag	107	19.445	ug/L	0.162	0	25	223259	1
[	Cd	111	19.616	ug/L	0.209	1	178	55690	2
[	Cd	114	20.122	ug/L	0.237	1	13	130354	3
[	Sb	121	0.064	ug/L	0.001	1	25	690	3
[	Sb	123	0.060	ug/L	0.001	0	18	493	2
[	Ba	135	0.032	ug/L	0.008	23	36	110	18
[	Ba	137	0.031	ug/L	0.001	4	58	183	1
[>	Tb	159		ug/L			438956	403687	2
[	Tl	205	0.029	ug/L	0.001	2	51	753	4
[	Pb	208	0.025	ug/L	0.001	4	402	1182	5
[	Bi	209		ug/L			320054	274264	2
[	Th	232	0.028	ug/L	0.001	3	58	1105	1
[	U	238	0.001	ug/L	0.000	30	29	53	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 11:49:27
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	214770	0
[	Be	9	198.862	ug/L	1.124	0	7	63186	1
	C	13		mg/L			3609	3633	1
	Cl	37		mg/L			2916004	3245561	2
[>	Sc	45		ug/L			282777	269204	3
[	V	51	199.148	ug/L	3.503	1	1730	2391134	3
[	V-1	51	197.983	ug/L	2.599	1	3780	2424713	3
[	Cr	52	199.241	ug/L	2.966	1	5667	2103037	2
[	Cr	53	196.628	ug/L	2.220	1	1296	248381	2
[	Mn	55	199.027	ug/L	3.671	1	420	3297450	2
[	Co	59	197.368	ug/L	1.482	0	50	2589589	3
[>	Ge	72		ug/L			391184	356522	0
[	Ni	60	192.036	ug/L	3.883	2	80	548263	1
[	Ni	62	191.262	ug/L	5.159	2	54	82325	2
[	Cu	63	193.526	ug/L	4.453	2	200	1244497	1
[	Cu	65	191.474	ug/L	3.723	1	107	589067	1
[	Zn	66	192.463	ug/L	4.642	2	422	365065	1
[	Zn	67	191.042	ug/L	1.591	0	147	62279	0
[	Zn	68	191.374	ug/L	2.549	1	6276	267186	0
[	As	75	193.643	ug/L	2.653	1	220	423725	0
[	As-1	75	194.563	ug/L	2.955	1	9042	426441	0
[	Se	82	184.914	ug/L	1.939	1	-8	39306	0
[	Se	78	188.260	ug/L	3.155	1	9216	103075	1
[	Mo	98	195.000	ug/L	4.042	2	470	1478926	1
	Y	89		ug/L			364750	324940	1
	Kr	83		ug/L			176	213	2
[>	In	115		ug/L			360532	327468	3
[	Ag	107	198.301	ug/L	3.725	1	25	2278520	1
[	Cd	111	194.899	ug/L	1.023	0	178	552461	2
[	Cd	114	193.321	ug/L	2.428	1	13	1253298	2
[	Sb	121	202.282	ug/L	1.630	0	25	2106485	3
[	Sb	123	199.071	ug/L	1.360	0	18	1591868	2
[	Ba	135	196.673	ug/L	2.120	1	36	472808	2
[	Ba	137	196.418	ug/L	3.951	2	58	818536	1
[>	Tb	159		ug/L			438956	400761	1
[	Tl	205	189.244	ug/L	1.173	0	51	4607314	1
[	Pb	208	192.593	ug/L	0.248	0	402	6212499	1
[	Bi	209		ug/L			320054	258145	0
[	Th	232	190.116	ug/L	1.419	0	58	7161547	1
[	U	238	192.747	ug/L	3.690	1	29	7603193	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR300
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 11:56:04
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	210250	0
[	Be	9	309.702	ug/L	3.726	1	7	96337	2
	C	13		mg/L			3609	3882	0
	Cl	37		mg/L			2916004	3565975	1
[>	Sc	45		ug/L			282777	294686	0
[	V	51	299.144	ug/L	8.740	2	1730	3931267	3
[	V-1	51	297.201	ug/L	8.019	2	3780	3982834	2
[	Cr	52	294.250	ug/L	7.808	2	5667	3398147	2
[	Cr	53	288.520	ug/L	5.864	2	1296	400481	2
[	Mn	55	289.570	ug/L	5.738	1	420	5253702	2
[	Co	59	288.338	ug/L	3.081	1	50	4141989	1
[>	Ge	72		ug/L			391184	361591	3
[	Ni	60	297.894	ug/L	4.616	1	80	862440	2
[	Ni	62	294.552	ug/L	6.318	2	54	128525	1
[	Cu	63	295.417	ug/L	4.737	1	200	1926210	1
[	Cu	65	289.392	ug/L	6.771	2	107	902586	1
[	Zn	66	292.471	ug/L	7.127	2	422	562249	1
[	Zn	67	290.056	ug/L	4.714	1	147	95806	1
[	Zn	68	286.548	ug/L	8.364	2	6276	402665	1
[	As	75	291.679	ug/L	4.885	1	220	647056	1
[	As-1	75	292.468	ug/L	4.733	1	9042	645777	1
[	Se	82	278.021	ug/L	1.983	0	-8	59938	2
[	Se	78	280.370	ug/L	3.186	1	9216	151512	2
[	Mo	98	304.838	ug/L	7.243	2	470	2343892	1
	Y	89		ug/L			364750	331114	0
	Kr	83		ug/L			176	221	1
[>	In	115		ug/L			360532	351251	2
[	Ag	107	288.779	ug/L	3.321	1	25	3560835	3
[	Cd	111	286.302	ug/L	1.621	0	178	870428	1
[	Cd	114	290.616	ug/L	4.826	1	13	2021735	3
[	Sb	121	300.713	ug/L	0.675	0	25	3358903	2
[	Sb	123	300.160	ug/L	3.436	1	18	2574591	1
[	Ba	135	294.919	ug/L	2.178	0	36	760572	1
[	Ba	137	291.421	ug/L	3.708	1	58	1303222	3
[>	Tb	159		ug/L			438956	424606	0
[	Tl	205	281.311	ug/L	4.088	1	51	7256461	2
[	Pb	208	287.406	ug/L	2.573	0	402	9822487	1
[	Bi	209		ug/L			320054	249318	2
[	Th	232	285.970	ug/L	4.191	1	58	11413917	2
[	U	238	282.536	ug/L	2.718	0	29	11809645	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 12:02:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	221073	2
[	Be	9	52.538	ug/L	0.906	1	7	17183	0
	C	13		mg/L			3609	2450	2
	Cl	37		mg/L			2916004	3651904	0
[>	Sc	45		ug/L			282777	303843	3
[	V	51	50.441	ug/L	0.721	1	1730	684853	2
[	V-1	51	50.344	ug/L	0.769	1	3780	698798	1
[	Cr	52	50.454	ug/L	0.450	0	5667	605699	2
[	Cr	53	50.152	ug/L	0.850	1	1296	72903	1
[	Mn	55	49.127	ug/L	1.215	2	420	918916	0
[	Co	59	49.384	ug/L	1.596	3	50	731080	1
[>	Ge	72		ug/L			391184	377079	0
[	Ni	60	51.833	ug/L	0.366	0	80	156580	0
[	Ni	62	50.689	ug/L	0.418	0	54	23117	0
[	Cu	63	51.912	ug/L	0.609	1	200	353254	1
[	Cu	65	51.199	ug/L	0.375	0	107	166693	1
[	Zn	66	51.300	ug/L	0.124	0	422	103232	0
[	Zn	67	51.027	ug/L	0.096	0	147	17698	0
[	Zn	68	51.015	ug/L	0.241	0	6276	79773	0
[	As	75	49.807	ug/L	0.501	1	220	115436	1
[	As-1	75	50.188	ug/L	0.484	0	9042	122823	1
[	Se	82	48.169	ug/L	0.283	0	-8	10823	1
[	Se	78	49.686	ug/L	0.500	1	9216	35314	1
[	Mo	98	50.787	ug/L	0.582	1	470	407773	1
	Y	89		ug/L			364750	349019	1
	Kr	83		ug/L			176	183	3
[>	In	115		ug/L			360532	365753	0
[	Ag	107	49.449	ug/L	0.859	1	25	634936	2
[	Cd	111	49.422	ug/L	0.437	0	178	156621	1
[	Cd	114	49.026	ug/L	1.217	2	13	355124	3
[	Sb	121	49.329	ug/L	0.242	0	25	573789	0
[	Sb	123	48.863	ug/L	0.135	0	18	436485	1
[	Ba	135	48.875	ug/L	0.470	0	36	131284	0
[	Ba	137	48.639	ug/L	0.219	0	58	226515	0
[>	Tb	159		ug/L			438956	432622	0
[	Tl	205	47.439	ug/L	0.066	0	51	1246758	0
[	Pb	208	48.912	ug/L	0.361	0	402	1703486	0
[	Bi	209		ug/L			320054	291126	1
[	Th	232	47.143	ug/L	0.412	0	58	1917124	1
[	U	238	47.945	ug/L	2.109	4	29	2041969	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 12:09:20
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	216043	1
[	Be	9	0.006	ug/L	0.014	221	7	7	55
	C	13		mg/L			3609	3347	2
	Cl	37		mg/L			2916004	3573193	1
[>	Sc	45		ug/L			282777	282410	3
[	V	51	0.020	ug/L	0.026	131	1730	1976	16
[	V-1	51	0.206	ug/L	0.020	9	3780	6411	2
[	Cr	52	0.059	ug/L	0.011	18	5667	6315	5
[	Cr	53	0.632	ug/L	0.035	5	1296	2131	2
[	Mn	55	0.002	ug/L	0.002	95	420	457	10
[	Co	59	0.001	ug/L	0.001	101	50	63	21
[>	Ge	72		ug/L			391184	356781	2
[	Ni	60	0.004	ug/L	0.003	77	80	85	10
[	Ni	62	0.026	ug/L	0.018	69	54	60	13
[	Cu	63	0.012	ug/L	0.003	23	200	262	9
[	Cu	65	0.009	ug/L	0.004	44	107	127	12
[	Zn	66	0.010	ug/L	0.008	77	422	404	5
[	Zn	67	0.123	ug/L	0.026	21	147	174	5
[	Zn	68	0.836	ug/L	0.080	9	6276	6866	1
[	As	75	0.045	ug/L	0.012	26	220	298	8
[	As-1	75	0.624	ug/L	0.083	13	9042	9586	0
[	Se	82	0.024	ug/L	0.040	166	-8	-2	282
[	Se	78	2.610	ug/L	0.358	13	9216	9716	0
[	Mo	98	-0.035	ug/L	0.003	9	470	162	18
	Y	89		ug/L			364750	327485	1
	Kr	83		ug/L			176	185	3
[>	In	115		ug/L			360532	346893	2
[	Ag	107	0.011	ug/L	0.002	17	25	153	12
[	Cd	111	0.005	ug/L	0.001	17	178	187	3
[	Cd	114	0.001	ug/L	0.001	66	13	22	26
[	Sb	121	0.037	ug/L	0.010	27	25	437	28
[	Sb	123	0.040	ug/L	0.010	24	18	355	25
[	Ba	135	0.001	ug/L	0.002	227	36	37	14
[	Ba	137	0.002	ug/L	0.003	135	58	65	18
[>	Tb	159		ug/L			438956	399668	2
[	Tl	205	0.006	ug/L	0.001	25	51	186	21
[	Pb	208	0.004	ug/L	0.001	18	402	490	6
[	Bi	209		ug/L			320054	279426	2
[	Th	232	0.040	ug/L	0.006	16	58	1564	17
[	U	238	0.002	ug/L	0.000	14	29	92	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, November 30, 2012 12:15:08
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	214859	1
[	Be	9	0.016	ug/L	0.009	57	7	10	26
	C	13		mg/L			3609	4143	2
	Cl	37		mg/L			2916004	3486457	0
[>	Sc	45		ug/L			282777	277301	0
[	V	51	0.019	ug/L	0.019	99	1730	1934	12
[	V-1	51	0.183	ug/L	0.014	7	3780	6013	3
[	Cr	52	U 0.074	ug/L	0.012	16	5667	6357	1
[	Cr	53	0.578	ug/L	0.055	9	1296	2022	3
[	Mn	55	U 0.133	ug/L	0.002	1	420	2675	1
[	Co	59	0.005	ug/L	0.002	32	50	117	18
[>	Ge	72		ug/L			391184	354640	2
[	Ni	60	U 0.017	ug/L	0.003	18	80	122	5
[	Ni	62	0.010	ug/L	0.028	272	54	53	20
[	Cu	63	U 0.092	ug/L	0.003	3	200	768	0
[	Cu	65	0.090	ug/L	0.005	5	107	373	4
[	Zn	66	U 0.869	ug/L	0.058	6	422	2021	5
[	Zn	67	0.845	ug/L	0.087	10	147	407	7
[	Zn	68	1.519	ug/L	0.083	5	6276	7752	1
[	As	75	U 0.048	ug/L	0.008	16	220	304	3
[	As-1	75	0.672	ug/L	0.136	20	9042	9630	0
[	Se	82	0.009	ug/L	0.073	806	-8	-6	244
[	Se	78	2.810	ug/L	0.578	20	9216	9756	0
[	Mo	98	-0.024	ug/L	0.008	33	470	242	23
	Y	89		ug/L			364750	322721	1
	Kr	83		ug/L			176	188	5
[>	In	115		ug/L			360532	338774	1
[	Ag	107	U 0.007	ug/L	0.002	23	25	104	15
[	Cd	111	U 0.003	ug/L	0.006	208	178	175	8
[	Cd	114	0.002	ug/L	0.001	21	13	28	13
[	Sb	121	U 0.022	ug/L	0.002	10	25	260	10
[	Sb	123	0.022	ug/L	0.003	14	18	195	13
[	Ba	135	0.011	ug/L	0.002	19	36	60	10
[	Ba	137	0.008	ug/L	0.002	20	58	89	8
[>	Tb	159		ug/L			438956	397639	2
[	Tl	205	0.006	ug/L	0.001	19	51	203	12
[	Pb	208	U 0.012	ug/L	0.000	3	402	747	3
[	Bi	209		ug/L			320054	276260	2
[	Th	232	0.040	ug/L	0.007	16	58	1538	14
[	U	238	0.001	ug/L	0.000	14	29	84	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, November 30, 2012 12:21:26
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			258961	219940	4
	Be	9	0.037	ug/L	0.018	48	7	17	32
	C	13		mg/L			3609	4378	5
	Cl	37		mg/L			2916004	3456308	0
>	Sc	45		ug/L			282777	275014	1
	V	51	0.030	ug/L	0.023	75	1730	2046	11
	V-1	51	0.164	ug/L	0.023	13	3780	5722	2
	Cr	52	U 0.162	ug/L	0.019	11	5667	7251	0
	Cr	53	0.569	ug/L	0.020	3	1296	1995	0
	Mn	55	U 0.019	ug/L	0.001	6	420	725	4
	Co	59	0.004	ug/L	0.001	25	50	99	13
>	Ge	72		ug/L			391184	357194	3
	Ni	60	U 0.015	ug/L	0.004	27	80	117	9
	Ni	62	0.039	ug/L	0.025	64	54	66	16
	Cu	63	0.948	ug/L	0.047	4	200	6284	3
	Cu	65	0.961	ug/L	0.027	2	107	3058	2
	Zn	66	U 0.929	ug/L	0.049	5	422	2147	1
	Zn	67	0.855	ug/L	0.080	9	147	412	4
	Zn	68	1.646	ug/L	0.186	11	6276	7978	1
	As	75	U 0.045	ug/L	0.020	45	220	298	13
	As-1	75	0.606	ug/L	0.155	25	9042	9553	0
	Se	82	-0.004	ug/L	0.016	377	-8	-9	38
	Se	78	2.544	ug/L	0.659	25	9216	9689	0
	Mo	98	-0.028	ug/L	0.003	9	470	218	5
	Y	89		ug/L			364750	330862	3
	Kr	83		ug/L			176	193	3
>	In	115		ug/L			360532	342759	5
	Ag	107	U 0.004	ug/L	0.001	13	25	72	8
	Cd	111	U 0.006	ug/L	0.004	63	178	187	2
	Cd	114	0.001	ug/L	0.002	133	13	23	57
	Sb	121	U 0.014	ug/L	0.003	19	25	179	11
	Sb	123	0.014	ug/L	0.002	12	18	138	12
	Ba	135	0.021	ug/L	0.001	6	36	86	4
	Ba	137	0.020	ug/L	0.004	19	58	141	7
>	Tb	159		ug/L			438956	403516	4
	Tl	205	0.004	ug/L	0.001	18	51	154	8
	Pb	208	U 0.009	ug/L	0.001	7	402	655	7
	Bi	209		ug/L			320054	276092	4
	Th	232	0.029	ug/L	0.005	17	58	1133	12
	U	238	0.002	ug/L	0.000	26	29	91	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB3 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, November 30, 2012 12:27:43
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	222475	0
[	Be	9	0.026	ug/L	0.012	47	7	14	27
	C	13		mg/L			3609	4083	1
	Cl	37		mg/L			2916004	3457159	0
[>	Sc	45		ug/L			282777	275003	0
[	V	51	0.019	ug/L	0.025	135	1730	1909	15
[	V-1	51	0.133	ug/L	0.010	7	3780	5335	1
[	Cr	52	U 0.090	ug/L	0.017	18	5667	6483	2
[	Cr	53	0.440	ug/L	0.034	7	1296	1828	3
[	Mn	55	U0.034	ug/L	0.002	4	420	988	1
[	Co	59	0.009	ug/L	0.000	2	50	163	2
[>	Ge	72		ug/L			391184	361981	2
[	Ni	60	U 0.017	ug/L	0.002	13	80	125	5
[	Ni	62	0.053	ug/L	0.025	47	54	73	17
[	Cu	63	U0.112	ug/L	0.007	6	200	916	4
[	Cu	65	0.110	ug/L	0.007	6	107	442	4
[	Zn	66	U1.022	ug/L	0.042	4	422	2357	1
[	Zn	67	1.001	ug/L	0.038	3	147	467	4
[	Zn	68	1.531	ug/L	0.306	20	6276	7925	3
[	As	75	U 0.037	ug/L	0.015	40	220	286	13
[	As-1	75	0.566	ug/L	0.099	17	9042	9597	0
[	Se	82	-0.006	ug/L	0.107	1737	-8	-9	244
[	Se	78	2.374	ug/L	0.435	18	9216	9735	0
[	Mo	98	-0.045	ug/L	0.001	2	470	88	9
	Y	89		ug/L			364750	333580	2
	Kr	83		ug/L			176	189	7
[>	In	115		ug/L			360532	341631	2
[	Ag	107	U 0.007	ug/L	0.001	9	25	105	5
[	Cd	111	U 0.005	ug/L	0.005	83	178	184	5
[	Cd	114	0.006	ug/L	0.002	27	13	54	18
[	Sb	121	U 0.008	ug/L	0.001	15	25	115	9
[	Sb	123	0.008	ug/L	0.000	5	18	84	1
[	Ba	135	0.010	ug/L	0.001	8	36	60	4
[	Ba	137	0.005	ug/L	0.001	12	58	77	1
[>	Tb	159		ug/L			438956	406271	1
[	Tl	205	0.006	ug/L	0.001	10	51	193	6
[	Pb	208	U0.010	ug/L	0.001	14	402	701	6
[	Bi	209		ug/L			320054	277374	0
[	Th	232	0.016	ug/L	0.001	3	58	659	1
[	U	238	0.004	ug/L	0.001	12	29	207	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, November 30, 2012 12:34:00
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	225044	1
[	Be	9	24.101	ug/L	0.543	2	7	8028	1
	C	13		mg/L			3609	4652	2
	Cl	37		mg/L			2916004	3445435	0
[>	Sc	45		ug/L			282777	273963	1
[	V	51	25.543	ug/L	0.643	2	1730	313588	2
[	V-1	51	25.640	ug/L	0.651	2	3780	322770	2
[	Cr	52	25.630	ug/L	0.620	2	5667	280131	1
[	Cr	53	25.925	ug/L	0.608	2	1296	34591	1
[	Mn	55	25.778	ug/L	0.495	1	420	435117	1
[	Co	59	25.918	ug/L	0.493	1	50	346134	1
[>	Ge	72		ug/L			391184	362725	1
[	Ni	60	26.234	ug/L	0.969	3	80	76238	2
[	Ni	62	26.099	ug/L	0.862	3	54	11469	1
[	Cu	63	27.638	ug/L	0.815	2	200	180938	1
[	Cu	65	27.904	ug/L	0.585	2	107	87410	0
[	Zn	66	82.204	ug/L	2.915	3	422	158819	1
[	Zn	67	74.662	ug/L	2.502	3	147	24837	1
[	Zn	68	80.132	ug/L	2.063	2	6276	117181	0
[	As	75	26.094	ug/L	0.700	2	220	58253	0
[	As-1	75	25.816	ug/L	0.802	3	9042	64823	0
[	Se	82	75.978	ug/L	1.948	2	-8	16422	1
[	Se	78	78.584	ug/L	2.406	3	9216	48740	0
[	Mo	98	24.154	ug/L	0.424	1	470	186743	0
	Y	89		ug/L			364750	333110	1
	Kr	83		ug/L			176	191	5
[>	In	115		ug/L			360532	336714	0
[	Ag	107	24.900	ug/L	0.411	1	25	294350	2
[	Cd	111	24.128	ug/L	0.101	0	178	70475	0
[	Cd	114	24.219	ug/L	0.468	1	13	161486	1
[	Sb	121	24.661	ug/L	0.315	1	25	264074	1
[	Sb	123	24.475	ug/L	0.341	1	18	201260	0
[	Ba	135	25.197	ug/L	0.299	1	36	62325	1
[	Ba	137	25.172	ug/L	0.248	0	58	107944	0
[>	Tb	159		ug/L			438956	406088	1
[	Tl	205	24.423	ug/L	0.757	3	51	602342	1
[	Pb	208	25.166	ug/L	0.617	2	402	822771	1
[	Bi	209		ug/L			320054	277539	0
[	Th	232	23.584	ug/L	0.214	0	58	900192	0
[	U	238	23.304	ug/L	0.681	2	29	931568	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, November 30, 2012 12:40:19
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	229363	1
[	Be	9	23.427	ug/L	0.428	1	7	7953	1
	C	13		mg/L			3609	4613	0
	Cl	37		mg/L			2916004	3428904	0
[>	Sc	45		ug/L			282777	271744	0
[	V	51	25.716	ug/L	0.816	3	1730	313112	2
[	V-1	51	25.713	ug/L	0.699	2	3780	321041	2
[	Cr	52	25.780	ug/L	0.871	3	5667	279459	2
[	Cr	53	25.769	ug/L	0.490	1	1296	34114	1
[	Mn	55	26.090	ug/L	0.496	1	420	436824	1
[	Co	59	26.118	ug/L	0.597	2	50	345979	1
[>	Ge	72		ug/L			391184	362831	1
[	Ni	60	25.663	ug/L	0.161	0	80	74629	1
[	Ni	62	25.701	ug/L	0.537	2	54	11301	1
[	Cu	63	26.991	ug/L	0.316	1	200	176796	1
[	Cu	65	26.796	ug/L	0.433	1	107	83981	1
[	Zn	66	81.939	ug/L	1.075	1	422	158425	2
[	Zn	67	73.489	ug/L	0.481	0	147	24467	2
[	Zn	68	79.315	ug/L	1.017	1	6276	116103	1
[	As	75	26.220	ug/L	0.310	1	220	58569	2
[	As-1	75	25.803	ug/L	0.508	1	9042	64829	2
[	Se	82	76.475	ug/L	0.679	0	-8	16538	1
[	Se	78	78.522	ug/L	1.703	2	9216	48731	1
[	Mo	98	24.085	ug/L	0.413	1	470	186277	1
	Y	89		ug/L			364750	334807	2
	Kr	83		ug/L			176	193	2
[>	In	115		ug/L			360532	341006	1
[	Ag	107	24.744	ug/L	0.713	2	25	296121	1
[	Cd	111	23.916	ug/L	0.711	2	178	70727	1
[	Cd	114	23.745	ug/L	0.903	3	13	160289	2
[	Sb	121	23.881	ug/L	0.660	2	25	258934	1
[	Sb	123	23.740	ug/L	0.598	2	18	197678	1
[	Ba	135	24.964	ug/L	0.739	2	36	62524	1
[	Ba	137	24.865	ug/L	0.511	2	58	107973	0
[>	Tb	159		ug/L			438956	411102	2
[	Tl	205	24.637	ug/L	0.774	3	51	615098	1
[	Pb	208	25.024	ug/L	0.625	2	402	828122	1
[	Bi	209		ug/L			320054	282666	1
[	Th	232	23.860	ug/L	0.541	2	58	921845	1
[	U	238	23.081	ug/L	0.439	1	29	934025	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 MB3SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, November 30, 2012 12:46:37
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	223968	0
[	Be	9	23.979	ug/L	0.388	1	7	7950	1
	C	13		mg/L			3609	4203	1
	Cl	37		mg/L			2916004	3410856	0
[>	Sc	45		ug/L			282777	270205	0
[	V	51	25.371	ug/L	0.158	0	1730	307225	0
[	V-1	51	25.373	ug/L	0.050	0	3780	315082	0
[	Cr	52	25.456	ug/L	0.399	1	5667	274472	1
[	Cr	53	25.458	ug/L	0.403	1	1296	33527	1
[	Mn	55	25.445	ug/L	0.763	2	420	423618	2
[	Co	59	25.821	ug/L	0.091	0	50	340150	0
[>	Ge	72		ug/L			391184	364731	1
[	Ni	60	25.641	ug/L	0.280	1	80	74955	0
[	Ni	62	25.133	ug/L	0.467	1	54	11112	2
[	Cu	63	26.342	ug/L	0.686	2	200	173453	1
[	Cu	65	26.368	ug/L	0.490	1	107	83094	2
[	Zn	66	79.306	ug/L	0.466	0	422	154140	0
[	Zn	67	72.240	ug/L	0.657	0	147	24179	1
[	Zn	68	78.738	ug/L	0.612	0	6276	115915	1
[	As	75	25.947	ug/L	0.457	1	220	58268	2
[	As-1	75	25.602	ug/L	0.216	0	9042	64731	1
[	Se	82	75.877	ug/L	1.047	1	-8	16495	1
[	Se	78	78.203	ug/L	0.758	0	9216	48826	0
[	Mo	98	23.445	ug/L	0.123	0	470	182312	1
	Y	89		ug/L			364750	333910	2
	Kr	83		ug/L			176	193	3
[>	In	115		ug/L			360532	341221	0
[	Ag	107	25.263	ug/L	0.170	0	25	302610	0
[	Cd	111	23.802	ug/L	0.533	2	178	70455	2
[	Cd	114	23.924	ug/L	0.174	0	13	161662	0
[	Sb	121	23.527	ug/L	0.062	0	25	255315	0
[	Sb	123	23.471	ug/L	0.106	0	18	195605	0
[	Ba	135	24.514	ug/L	0.103	0	36	61451	0
[	Ba	137	24.614	ug/L	0.244	0	58	106973	1
[>	Tb	159		ug/L			438956	407334	1
[	Tl	205	24.290	ug/L	0.297	1	51	601109	2
[	Pb	208	25.047	ug/L	0.066	0	402	821516	0
[	Bi	209		ug/L			320054	282554	0
[	Th	232	23.598	ug/L	0.208	0	58	903502	0
[	U	238	23.245	ug/L	0.416	1	29	931992	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 Q RHN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Friday, November 30, 2012 12:52:56
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	238203	1
[	Be	9	0.017	ug/L	0.004	24	7	12	10
	C	13		mg/L			3609	3083	2
	Cl	37		mg/L			2916004	3321206	1
[>	Sc	45		ug/L			282777	287095	2
[	V	51	0.170	ug/L	0.015	8	1730	3931	4
[	V-1	51	0.199	ug/L	0.017	8	3780	6434	2
[	Cr	52	0.074	ug/L	0.018	24	5667	6582	2
[	Cr	53	0.170	ug/L	0.033	19	1296	1544	0
[	Mn	55	23.201	ug/L	0.613	2	420	410599	4
[	Co	59	0.368	ug/L	0.013	3	50	5200	4
[>	Ge	72		ug/L			391184	379554	2
[	Ni	60	1.743	ug/L	0.066	3	80	5377	5
[	Ni	62	1.561	ug/L	0.059	3	54	768	5
[	Cu	63	0.818	ug/L	0.019	2	200	5792	4
[	Cu	65	0.860	ug/L	0.031	3	107	2921	5
[	Zn	66	202.780	ug/L	6.884	3	422	409701	5
[	Zn	67	178.482	ug/L	6.680	3	147	61985	5
[	Zn	68	198.713	ug/L	6.678	3	6276	295257	5
[	As	75	0.166	ug/L	0.016	9	220	601	8
[	As-1	75	0.420	ug/L	0.066	15	9042	9733	0
[	Se	82	0.116	ug/L	0.055	47	-8	17	71
[	Se	78	1.277	ug/L	0.340	26	9216	9623	0
[	Mo	98	0.140	ug/L	0.011	7	470	1590	7
	Y	89		ug/L			364750	351596	3
	Kr	83		ug/L			176	188	4
[>	In	115		ug/L			360532	353124	1
[	Ag	107	0.009	ug/L	0.002	24	25	132	20
[	Cd	111	0.876	ug/L	0.071	8	178	2854	9
[	Cd	114	0.859	ug/L	0.048	5	13	6023	7
[	Sb	121	0.021	ug/L	0.003	12	25	262	12
[	Sb	123	0.020	ug/L	0.002	9	18	187	10
[	Ba	135	7.824	ug/L	0.109	1	36	20323	3
[	Ba	137	7.807	ug/L	0.211	2	58	35164	4
[>	Tb	159		ug/L			438956	422688	1
[	Tl	205	0.009	ug/L	0.001	9	51	275	9
[	Pb	208	0.015	ug/L	0.001	10	402	890	7
[	Bi	209		ug/L			320054	293005	2
[	Th	232	0.057	ug/L	0.014	25	58	2312	26
[	U	238	0.019	ug/L	0.002	13	29	803	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS55 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, November 30, 2012 12:59:14
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	217835	4
[	Be	9	0.025	ug/L	0.007	28	7	14	20
	C	13		mg/L			3609	601096	0
	Cl	37		mg/L			2916004	3758216	0
[>	Sc	45		ug/L			282777	329750	0
[	V	51	2.963	ug/L	0.091	3	1730	45560	2
[	V-1	51	0.231	ug/L	0.027	11	3780	7868	5
[	Cr	52	11.300	ug/L	0.241	2	5667	152370	1
[	Cr	53	2.360	ug/L	0.032	1	1296	5164	1
[	Mn	55	50.865	ug/L	1.022	2	420	1032985	1
[	Co	59	0.143	ug/L	0.001	0	50	2356	1
[>	Ge	72		ug/L			391184	365654	2
[	Ni	60	1.866	ug/L	0.069	3	80	5535	1
[	Ni	62	1.753	ug/L	0.066	3	54	824	3
[	Cu	63	112.873	ug/L	1.797	1	200	744451	0
[	Cu	65	110.435	ug/L	1.194	1	107	348502	1
[	Zn	66	37.577	ug/L	0.558	1	422	73428	2
[	Zn	67	32.777	ug/L	0.565	1	147	11074	3
[	Zn	68	36.834	ug/L	0.599	1	6276	57480	1
[	As	75	U 0.198	ug/L	0.008	4	220	650	1
[	As-1	75	0.717	ug/L	0.028	3	9042	10034	2
[	Se	82	1.679	ug/L	0.068	4	-8	357	2
[	Se	78	4.090	ug/L	0.143	3	9216	10725	2
[	Mo	98	2.530	ug/L	0.039	1	470	20114	0
	Y	89		ug/L			364750	344429	2
	Kr	83		ug/L			176	183	11
[>	In	115		ug/L			360532	369643	2
[	Ag	107	0.062	ug/L	0.004	6	25	833	5
[	Cd	111	0.190	ug/L	0.009	4	178	789	2
[	Cd	114	0.183	ug/L	0.002	0	13	1355	1
[	Sb	121	0.070	ug/L	0.002	3	25	849	2
[	Sb	123	0.067	ug/L	0.004	6	18	626	6
[	Ba	135	3.276	ug/L	0.105	3	36	8924	1
[	Ba	137	3.281	ug/L	0.063	1	58	15492	0
[>	Tb	159		ug/L			438956	457104	2
[	Tl	205	0.005	ug/L	0.001	11	51	197	6
[	Pb	208	0.857	ug/L	0.021	2	402	31929	0
[	Bi	209		ug/L			320054	294612	2
[	Th	232	0.087	ug/L	0.039	44	58	3773	41
[	U	238	0.017	ug/L	0.001	5	29	784	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS64 A REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, November 30, 2012 13:05:31
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	196608	1
[	Be	9	0.019	ug/L	0.009	46	7	10	24
	C	13		mg/L			3609	6762	18
	Cl	37		mg/L			2916004	3857309	0
[>	Sc	45		ug/L			282777	308180	1
[	V	51	0.603	ug/L	0.004	0	1730	10171	1
[	V-1	51	0.708	ug/L	0.003	0	3780	14032	1
[	Cr	52	0.288	ug/L	0.018	6	5667	9647	3
[	Cr	53	0.630	ug/L	0.011	1	1296	2324	2
[	Mn	55	216.898	ug/L	1.072	0	420	4115602	1
[	Co	59	0.209	ug/L	0.004	1	50	3189	1
[>	Ge	72		ug/L			391184	359385	1
[	Ni	60	0.281	ug/L	0.002	0	80	883	1
[	Ni	62	0.240	ug/L	0.063	26	54	153	18
[	Cu	63	0.105	ug/L	0.009	8	200	861	7
[	Cu	65	0.097	ug/L	0.010	10	107	398	8
[	Zn	66	0.449	ug/L	0.016	3	422	1246	3
[	Zn	67	0.904	ug/L	0.082	9	147	432	7
[	Zn	68	1.795	ug/L	0.021	1	6276	8237	1
[	As	75	135.171	ug/L	0.623	0	220	298250	1
[	As-1	75	138.094	ug/L	0.630	0	9042	307554	1
[	Se	82	0.174	ug/L	0.022	12	-8	29	16
[	Se	78	2.641	ug/L	0.049	1	9216	9805	1
[	Mo	98	0.030	ug/L	0.004	13	470	662	5
	Y	89		ug/L			364750	325008	1
	Kr	83		ug/L			176	181	6
[>	In	115		ug/L			360532	360442	1
[	Ag	107	0.006	ug/L	0.000	7	25	105	6
[	Cd	111	0.018	ug/L	0.004	23	178	233	5
[	Cd	114	0.002	ug/L	0.001	37	13	26	16
[	Sb	121	0.037	ug/L	0.001	3	25	445	3
[	Sb	123	0.038	ug/L	0.002	5	18	349	6
[	Ba	135	8.084	ug/L	0.097	1	36	21433	3
[	Ba	137	8.086	ug/L	0.041	0	58	37159	2
[>	Tb	159		ug/L			438956	431686	2
[	Tl	205	0.003	ug/L	0.000	11	51	124	9
[	Pb	208	0.015	ug/L	0.001	6	402	912	4
[	Bi	209		ug/L			320054	288562	3
[	Th	232	0.008	ug/L	0.000	2	58	389	1
[	U	238	0.001	ug/L	0.000	12	29	80	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, November 30, 2012 13:11:50
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	228077	1
[	Be	9	0.172	ug/L	0.026	14	7	64	11
	C	13		mg/L			3609	7655	2
	Cl	37		mg/L			2916004	3995581	1
[>	Sc	45		ug/L			282777	397412	4
[	V	51	14.564	ug/L	0.387	2	1730	260377	4
[	V-1	51	14.853	ug/L	0.454	3	3780	273435	4
[	Cr	52	30.198	ug/L	0.729	2	5667	477119	1
[	Cr	53	30.180	ug/L	0.723	2	1296	58090	2
[	Mn	55	600.631	ug/L	23.496	3	420	14682708	2
[	Co	59	4.221	ug/L	0.137	3	50	81769	2
[>	Ge	72		ug/L			391184	403068	0
[	Ni	60	26.995	ug/L	0.296	1	80	87212	1
[	Ni	62	30.297	ug/L	0.631	2	54	14792	2
[	Cu	63	129.839	ug/L	0.532	0	200	944130	1
[	Cu	65	128.732	ug/L	2.682	2	107	447815	2
[	Zn	66	1807.026	ug/L	26.278	1	422	3872067	1
[	Zn	67	1554.805	ug/L	9.076	0	147	571960	0
[	Zn	68	1737.229	ug/L	11.908	0	6276	2690179	1
[	As	75	5.451	ug/L	0.034	0	220	13706	1
[	As-1	75	5.677	ug/L	0.041	0	9042	23113	1
[	Se	82	1.012	ug/L	0.067	6	-8	234	7
[	Se	78	1.762	ug/L	0.105	5	9216	10497	0
[	Mo	98	23.977	ug/L	0.159	0	470	206027	0
	Y	89		ug/L			364750	443920	0
	Kr	83		ug/L			176	208	2
[>	In	115		ug/L			360532	375955	2
[	Ag	107	0.461	ug/L	0.031	6	25	6118	8
[	Cd	111	5.110	ug/L	0.014	0	178	16811	2
[	Cd	114	4.835	ug/L	0.066	1	13	36008	2
[	Sb	121	6.678	ug/L	0.091	1	25	79878	3
[	Sb	123	6.607	ug/L	0.041	0	18	60685	2
[	Ba	135	146.606	ug/L	3.317	2	36	404727	3
[	Ba	137	146.752	ug/L	0.554	0	58	702368	2
[>	Tb	159		ug/L			438956	452536	0
[	Tl	205	0.043	ug/L	0.001	2	51	1229	3
[	Pb	208	269.314	ug/L	3.850	1	402	9809513	1
[	Bi	209		ug/L			320054	301153	1
[	Th	232	0.541	ug/L	0.014	2	58	23062	2
[	U	238	0.165	ug/L	0.002	1	29	7377	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 13:18:08
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	244163	0
[	Be	9	51.207	ug/L	0.831	1	7	18501	1
	C	13		mg/L			3609	3298	4
	Cl	37		mg/L			2916004	3814607	0
[>	Sc	45		ug/L			282777	328136	1
[	V	51	50.100	ug/L	0.860	1	1730	734690	0
[	V-1	51	49.998	ug/L	0.928	1	3780	749621	0
[	Cr	52	49.915	ug/L	0.904	1	5667	647238	1
[	Cr	53	49.612	ug/L	0.793	1	1296	77912	0
[	Mn	55	49.161	ug/L	1.621	3	420	993287	2
[	Co	59	50.154	ug/L	0.460	0	50	802232	0
[>	Ge	72		ug/L			391184	412107	1
[	Ni	60	52.557	ug/L	0.347	0	80	173514	1
[	Ni	62	52.166	ug/L	0.324	0	54	25999	0
[	Cu	63	51.969	ug/L	0.645	1	200	386518	2
[	Cu	65	51.629	ug/L	0.792	1	107	183702	1
[	Zn	66	50.472	ug/L	0.713	1	422	110997	0
[	Zn	67	51.177	ug/L	0.659	1	147	19398	1
[	Zn	68	50.809	ug/L	0.840	1	6276	86864	2
[	As	75	49.937	ug/L	0.776	1	220	126481	1
[	As-1	75	50.208	ug/L	0.623	1	9042	134273	0
[	Se	82	48.506	ug/L	1.147	2	-8	11912	2
[	Se	78	49.591	ug/L	0.068	0	9216	38538	0
[	Mo	98	50.068	ug/L	1.121	2	470	439334	2
	Y	89		ug/L			364750	380168	2
	Kr	83		ug/L			176	205	3
[>	In	115		ug/L			360532	397018	1
[	Ag	107	50.342	ug/L	1.110	2	25	701455	0
[	Cd	111	49.009	ug/L	0.968	1	178	168564	1
[	Cd	114	48.961	ug/L	0.313	0	13	384899	0
[	Sb	121	48.935	ug/L	0.756	1	25	617773	0
[	Sb	123	48.528	ug/L	1.117	2	18	470476	1
[	Ba	135	49.096	ug/L	1.308	2	36	143124	1
[	Ba	137	48.165	ug/L	1.186	2	58	243437	1
[>	Tb	159		ug/L			438956	464843	1
[	Tl	205	47.674	ug/L	0.676	1	51	1346228	2
[	Pb	208	47.776	ug/L	0.310	0	402	1787806	1
[	Bi	209		ug/L			320054	311130	2
[	Th	232	45.945	ug/L	0.856	1	58	2008001	3
[	U	238	46.960	ug/L	1.023	2	29	2148419	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 13:24:46
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	241002	0
[	Be	9	0.008	ug/L	0.014	168	7	9	52
	C	13		mg/L			3609	3807	1
	Cl	37		mg/L			2916004	3828175	0
[>	Sc	45		ug/L			282777	314498	1
|	V	51	0.019	ug/L	0.015	76	1730	2197	10
|	V-1	51	0.082	ug/L	0.008	9	3780	5374	3
|	Cr	52	0.083	ug/L	0.005	5	5667	7319	0
|	Cr	53	0.272	ug/L	0.027	9	1296	1843	1
|	Mn	55	0.003	ug/L	0.002	55	420	527	6
[	Co	59	0.001	ug/L	0.000	51	50	63	7
[>	Ge	72		ug/L			391184	401344	0
|	Ni	60	0.003	ug/L	0.004	142	80	92	14
|	Ni	62	0.007	ug/L	0.020	276	54	59	16
|	Cu	63	0.008	ug/L	0.003	37	200	264	8
|	Cu	65	0.008	ug/L	0.002	30	107	138	6
|	Zn	66	0.032	ug/L	0.013	42	422	501	5
|	Zn	67	0.041	ug/L	0.038	93	147	166	9
|	Zn	68	0.587	ug/L	0.058	9	6276	7342	1
|	As	75	0.021	ug/L	0.006	30	220	276	5
|	As-1	75	0.443	ug/L	0.010	2	9042	10348	0
|	Se	82	0.056	ug/L	0.054	95	-8	4	303
|	Se	78	1.876	ug/L	0.081	4	9216	10517	0
[	Mo	98	-0.042	ug/L	0.001	3	470	123	9
	Y	89		ug/L			364750	361729	1
	Kr	83		ug/L			176	185	8
[>	In	115		ug/L			360532	383798	0
|	Ag	107	0.009	ug/L	0.002	26	25	150	21
|	Cd	111	0.005	ug/L	0.003	63	178	207	5
|	Cd	114	0.001	ug/L	0.001	39	13	24	15
|	Sb	121	0.031	ug/L	0.009	30	25	400	28
|	Sb	123	0.030	ug/L	0.008	25	18	303	23
|	Ba	135	0.005	ug/L	0.001	14	36	51	3
[	Ba	137	0.002	ug/L	0.001	23	58	74	4
[>	Tb	159		ug/L			438956	444331	0
|	Tl	205	0.006	ug/L	0.002	28	51	222	22
|	Pb	208	0.005	ug/L	0.001	19	402	599	6
|	Bi	209		ug/L			320054	297643	1
|	Th	232	0.035	ug/L	0.008	23	58	1539	23
[	U	238	0.002	ug/L	0.000	24	29	114	18

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 ADUP REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, November 30, 2012 13:39:18
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	233172	0
[	Be	9	0.014	ug/L	0.010	68	7	11	29
	C	13		mg/L			3609	3464	2
	Cl	37		mg/L			2916004	4164443	0
[>	Sc	45		ug/L			282777	315198	1
[	V	51	14.720	ug/L	0.236	1	1730	208724	1
[	V-1	51	14.808	ug/L	0.274	1	3780	216232	1
[	Cr	52	1.750	ug/L	0.042	2	5667	27887	0
[	Cr	53	2.778	ug/L	0.179	6	1296	5552	3
[	Mn	55	63.368	ug/L	0.512	0	420	1229970	0
[	Co	59	0.056	ug/L	0.001	2	50	909	3
[>	Ge	72		ug/L			391184	389514	0
[	Ni	60	0.269	ug/L	0.008	2	80	920	3
[	Ni	62	0.384	ug/L	0.040	10	54	234	8
[	Cu	63	1.006	ug/L	0.021	2	200	7268	2
[	Cu	65	0.739	ug/L	0.020	2	107	2591	2
[	Zn	66	0.424	ug/L	0.006	1	422	1299	0
[	Zn	67	1.668	ug/L	0.113	6	147	739	5
[	Zn	68	1.123	ug/L	0.078	6	6276	7925	1
[	As	75	0.191	ug/L	0.006	3	220	675	2
[	As-1	75	0.635	ug/L	0.022	3	9042	10496	1
[	Se	82	0.149	ug/L	0.075	50	-8	25	67
[	Se	78	2.138	ug/L	0.109	5	9216	10351	0
[	Mo	98	0.055	ug/L	0.004	7	470	925	3
	Y	89		ug/L			364750	375474	2
	Kr	83		ug/L			176	197	6
[>	In	115		ug/L			360532	372736	0
[	Ag	107	0.011	ug/L	0.002	18	25	164	16
[	Cd	111	0.010	ug/L	0.008	79	178	217	12
[	Cd	114	0.004	ug/L	0.001	20	13	44	13
[	Sb	121	0.023	ug/L	0.002	6	25	300	5
[	Sb	123	0.020	ug/L	0.002	11	18	203	10
[	Ba	135	1.757	ug/L	0.024	1	36	4847	1
[	Ba	137	1.788	ug/L	0.059	3	58	8545	3
[>	Tb	159		ug/L			438956	431903	0
[	Tl	205	0.005	ug/L	0.001	13	51	170	9
[	Pb	208	0.159	ug/L	0.003	2	402	5913	1
[	Bi	209		ug/L			320054	284432	1
[	Th	232	0.046	ug/L	0.001	1	58	1916	2
[	U	238	0.015	ug/L	0.001	4	29	673	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 A REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, November 30, 2012 13:45:35
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	**Li**	**6**		ug/L			258961	231670	1
[	**Be**	**9**	**0.028**	ug/L	0.003	10	7	15	4
	C	**13**		mg/L			3609	3396	2
	Cl	**37**		mg/L			2916004	4127175	0
[>	**Sc**	**45**		ug/L			282777	318763	1
[	**V**	**51**	**14.679**	ug/L	0.526	3	1730	210483	3
[	**V-1**	**51**	**14.961**	ug/L	0.513	3	3780	220886	3
[	**Cr**	**52**	**1.734**	ug/L	0.078	4	5667	28013	3
[	**Cr**	**53**	**3.362**	ug/L	0.065	1	1296	6492	2
[	**Mn**	**55**	**64.337**	ug/L	2.504	3	420	1263067	4
[	**Co**	**59**	**0.060**	ug/L	0.003	5	50	983	2
[>	**Ge**	**72**		ug/L			391184	387762	2
[	**Ni**	**60**	**0.257**	ug/L	0.020	7	80	877	5
[	**Ni**	**62**	**0.405**	ug/L	0.022	5	54	242	3
[	**Cu**	**63**	**1.001**	ug/L	0.014	1	200	7200	2
[	**Cu**	**65**	**0.707**	ug/L	0.035	4	107	2473	4
[	**Zn**	**66**	**0.433**	ug/L	0.025	5	422	1311	5
[	**Zn**	**67**	**1.804**	ug/L	0.062	3	147	784	2
[	**Zn**	**68**	**0.971**	ug/L	0.022	2	6276	7663	2
[	**As**	**75**	**0.184**	ug/L	0.028	15	220	657	10
[	**As-1**	**75**	**0.531**	ug/L	0.110	20	9042	10201	1
[	**Se**	**82**	**0.184**	ug/L	0.003	1	-8	33	4
[	**Se**	**78**	**1.732**	ug/L	0.456	26	9216	10079	1
[	**Mo**	**98**	**0.052**	ug/L	0.005	9	470	897	6
	Y	**89**		ug/L			364750	379880	2
	Kr	**83**		ug/L			176	190	4
[>	**In**	**115**		ug/L			360532	372664	1
[	**Ag**	**107**	**0.009**	ug/L	0.002	18	25	144	15
[	**Cd**	**111**	**-0.021**	ug/L	0.015	72	178	116	44
[	**Cd**	**114**	**0.003**	ug/L	0.001	48	13	34	27
[	**Sb**	**121**	**0.021**	ug/L	0.002	11	25	270	10
[	**Sb**	**123**	**0.020**	ug/L	0.003	14	18	203	12
[	**Ba**	**135**	**1.827**	ug/L	0.099	5	36	5036	5
[	**Ba**	**137**	**1.854**	ug/L	0.082	4	58	8852	3
[>	**Tb**	**159**		ug/L			438956	437498	1
[	**Tl**	**205**	**0.003**	ug/L	0.000	7	51	134	4
[	**Pb**	**208**	**0.159**	ug/L	0.005	3	402	5999	3
[	**Bi**	**209**		ug/L			320054	289482	1
[	**Th**	**232**	**0.041**	ug/L	0.003	7	58	1750	7
[	**U**	**238**	**0.014**	ug/L	0.001	4	29	652	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 ASPK REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, November 30, 2012 13:51:52
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	204643	0
[	Be	9	2.616	ug/L	0.142	5	7	797	4
	C	13		mg/L			3609	3205	2
	Cl	37		mg/L			2916004	4034672	0
[>	Sc	45		ug/L			282777	287093	1
[	V	51	17.630	ug/L	0.799	4	1730	227261	2
[	V-1	51	17.970	ug/L	0.796	4	3780	238101	2
[	Cr	52	4.317	ug/L	0.226	5	5667	54213	3
[	Cr	53	6.144	ug/L	0.248	4	1296	9592	2
[	Mn	55	68.148	ug/L	3.395	4	420	1204340	3
[	Co	59	2.544	ug/L	0.105	4	50	35632	2
[>	Ge	72		ug/L			391184	351729	1
[	Ni	60	2.939	ug/L	0.069	2	80	8350	3
[	Ni	62	3.221	ug/L	0.131	4	54	1415	3
[	Cu	63	3.720	ug/L	0.096	2	200	23777	2
[	Cu	65	3.491	ug/L	0.135	3	107	10689	3
[	Zn	66	8.844	ug/L	0.367	4	422	16914	4
[	Zn	67	9.692	ug/L	0.344	3	147	3243	4
[	Zn	68	9.721	ug/L	0.554	5	6276	18741	3
[	As	75	2.919	ug/L	0.111	3	220	6495	3
[	As-1	75	3.442	ug/L	0.165	4	9042	15427	1
[	Se	82	8.107	ug/L	0.323	3	-8	1692	4
[	Se	78	10.865	ug/L	0.578	5	9216	13674	1
[	Mo	98	2.454	ug/L	0.142	5	470	18778	5
	Y	89		ug/L			364750	339933	0
	Kr	83		ug/L			176	187	4
[>	In	115		ug/L			360532	336158	2
[	Ag	107	2.503	ug/L	0.129	5	25	29530	2
[	Cd	111	2.521	ug/L	0.159	6	178	7493	4
[	Cd	114	2.488	ug/L	0.140	5	13	16558	3
[	Sb	121	2.357	ug/L	0.114	4	25	25203	2
[	Sb	123	2.338	ug/L	0.112	4	18	19202	3
[	Ba	135	4.423	ug/L	0.264	5	36	10941	3
[	Ba	137	4.430	ug/L	0.295	6	58	18995	4
[>	Tb	159		ug/L			438956	402982	0
[	Tl	205	2.398	ug/L	0.080	3	51	58742	3
[	Pb	208	2.610	ug/L	0.120	4	402	85033	4
[	Bi	209		ug/L			320054	264295	0
[	Th	232	2.313	ug/L	0.109	4	58	87653	4
[	U	238	2.321	ug/L	0.073	3	29	92122	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 B REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, November 30, 2012 13:58:09
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	207894	4
[	Be	9	0.032	ug/L	0.018	57	7	15	32
	C	13		mg/L			3609	3265	1
	Cl	37		mg/L			2916004	4307762	1
[>	Sc	45		ug/L			282777	300973	5
[	V	51	5.787	ug/L	0.103	1	1730	79481	6
[	V-1	51	6.339	ug/L	0.104	1	3780	90682	5
[	Cr	52	1.382	ug/L	0.025	1	5667	22293	4
[	Cr	53	3.346	ug/L	0.098	2	1296	6101	3
[	Mn	55	153.233	ug/L	1.225	0	420	2838845	5
[	Co	59	0.085	ug/L	0.005	5	50	1294	0
[>	Ge	72		ug/L			391184	360711	4
[	Ni	60	0.289	ug/L	0.013	4	80	909	8
[	Ni	62	0.496	ug/L	0.026	5	54	265	1
[	Cu	63	0.761	ug/L	0.024	3	200	5131	4
[	Cu	65	0.416	ug/L	0.016	3	107	1395	7
[	Zn	66	0.462	ug/L	0.010	2	422	1276	5
[	Zn	67	1.265	ug/L	0.086	6	147	552	9
[	Zn	68	1.430	ug/L	0.214	14	6276	7755	1
[	As	75	0.199	ug/L	0.032	16	220	645	15
[	As-1	75	0.621	ug/L	0.144	23	9042	9679	1
[	Se	82	0.339	ug/L	0.095	27	-8	65	36
[	Se	78	2.234	ug/L	0.745	33	9216	9624	1
[	Mo	98	0.017	ug/L	0.004	21	470	561	4
	Y	89		ug/L			364750	336598	4
	Kr	83		ug/L			176	180	6
[>	In	115		ug/L			360532	354157	4
[	Ag	107	0.009	ug/L	0.000	3	25	131	6
[	Cd	111	-0.038	ug/L	0.025	65	178	60	130
[	Cd	114	0.001	ug/L	0.002	136	13	22	57
[	Sb	121	0.015	ug/L	0.001	6	25	192	4
[	Sb	123	0.016	ug/L	0.002	15	18	158	16
[	Ba	135	3.524	ug/L	0.022	0	36	9199	4
[	Ba	137	3.484	ug/L	0.003	0	58	15763	4
[>	Tb	159		ug/L			438956	417683	4
[	Tl	205	0.003	ug/L	0.001	25	51	117	10
[	Pb	208	0.051	ug/L	0.003	4	402	2108	4
[	Bi	209		ug/L			320054	277801	5
[	Th	232	0.027	ug/L	0.002	6	58	1115	2
[	U	238	0.007	ug/L	0.001	9	29	334	13

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 D REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, November 30, 2012 14:04:25
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	184885	1
[	Be	9	0.007	ug/L	0.013	179	7	7	50
	C	13		mg/L			3609	3235	4
	Cl	37		mg/L			2916004	6278969	1
[>	Sc	45		ug/L			282777	285818	0
[	V	51	1.672	ug/L	0.076	4	1730	23047	3
[	V-1	51	3.333	ug/L	0.129	3	3780	47095	3
[	Cr	52	0.532	ug/L	0.029	5	5667	11674	2
[	Cr	53	5.738	ug/L	0.415	7	1296	9009	6
[	Mn	55	39.975	ug/L	1.706	4	420	703699	3
[	Co	59	0.037	ug/L	0.003	7	50	559	6
[>	Ge	72		ug/L			391184	331810	1
[	Ni	60	0.445	ug/L	0.011	2	80	1251	3
[	Ni	62	0.631	ug/L	0.030	4	54	298	3
[	Cu	63	1.338	ug/L	0.090	6	200	8171	5
[	Cu	65	0.145	ug/L	0.017	11	107	507	9
[	Zn	66	0.575	ug/L	0.051	8	422	1373	6
[	Zn	67	1.336	ug/L	0.191	14	147	529	11
[	Zn	68	1.729	ug/L	0.120	6	6276	7521	1
[	As	75	0.379	ug/L	0.074	19	220	958	14
[	As-1	75	0.729	ug/L	0.093	12	9042	9126	1
[	Se	82	1.250	ug/L	0.102	8	-8	239	7
[	Se	78	3.023	ug/L	0.281	9	9216	9231	1
[	Mo	98	-0.016	ug/L	0.003	17	470	289	6
	Y	89		ug/L			364750	307656	1
	Kr	83		ug/L			176	190	0
[>	In	115		ug/L			360532	329723	2
[	Ag	107	0.007	ug/L	0.002	22	25	106	19
[	Cd	111	-0.092	ug/L	0.048	52	178	-100	136
[	Cd	114	0.004	ug/L	0.001	32	13	36	22
[	Sb	121	0.031	ug/L	0.001	4	25	349	3
[	Sb	123	0.029	ug/L	0.003	10	18	251	7
[	Ba	135	4.986	ug/L	0.217	4	36	12095	2
[	Ba	137	4.963	ug/L	0.246	4	58	20871	3
[>	Tb	159		ug/L			438956	406937	2
[	Tl	205	0.002	ug/L	0.001	31	51	97	16
[	Pb	208	0.071	ug/L	0.001	1	402	2712	1
[	Bi	209		ug/L			320054	260550	4
[	Th	232	0.007	ug/L	0.000	3	58	335	3
[	U	238	0.007	ug/L	0.000	1	29	304	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS14 H REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, November 30, 2012 14:10:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			258961	170637	1
	Be	9	0.011	ug/L	0.009	84	7	7	33
	C	13		mg/L			3609	2877	0
	Cl	37		mg/L			2916004	3785462	0
>	Sc	45		ug/L			282777	271657	1
	V	51	0.902	ug/L	0.018	2	1730	12586	3
	V-1	51	1.449	ug/L	0.041	2	3780	21508	1
	Cr	52	0.312	ug/L	0.023	7	5667	8763	2
	Cr	53	2.039	ug/L	0.191	9	1296	3843	5
	Mn	55	380.713	ug/L	1.542	0	420	6367022	0
	Co	59	0.166	ug/L	0.003	2	50	2250	0
>	Ge	72		ug/L			391184	317251	1
	Ni	60	0.808	ug/L	0.023	2	80	2117	1
	Ni	62	0.831	ug/L	0.036	4	54	361	1
	Cu	63	0.198	ug/L	0.015	7	200	1293	6
	Cu	65	0.103	ug/L	0.003	2	107	370	1
	Zn	66	0.677	ug/L	0.024	3	422	1484	0
	Zn	67	1.224	ug/L	0.131	10	147	473	7
	Zn	68	2.050	ug/L	0.136	6	6276	7581	1
	As	75	0.821	ug/L	0.016	1	220	1775	1
	As-1	75	1.384	ug/L	0.056	4	9042	9979	0
	Se	82	0.480	ug/L	0.018	3	-8	83	5
	Se	78	3.064	ug/L	0.219	7	9216	8844	0
	Mo	98	-0.023	ug/L	0.001	2	470	229	3
	Y	89		ug/L			364750	288951	1
	Kr	83		ug/L			176	180	2
>	In	115		ug/L			360532	320060	1
	Ag	107	0.003	ug/L	0.001	27	25	53	16
	Cd	111	-0.000	ug/L	0.017	7506	178	157	29
	Cd	114	0.002	ug/L	0.001	47	13	25	25
	Sb	121	0.019	ug/L	0.001	4	25	212	3
	Sb	123	0.018	ug/L	0.001	8	18	159	6
	Ba	135	4.639	ug/L	0.158	3	36	10931	2
	Ba	137	4.579	ug/L	0.133	2	58	18701	1
>	Tb	159		ug/L			438956	391738	0
	Tl	205	0.003	ug/L	0.000	8	51	109	4
	Pb	208	0.063	ug/L	0.001	2	402	2336	2
	Bi	209		ug/L			320054	262243	2
	Th	232	0.011	ug/L	0.001	6	58	449	5
	U	238	0.001	ug/L	0.000	9	29	67	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, November 30, 2012 14:17:02
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

RR Ni, Cu

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	163824	2
[	Be	9	0.043	ug/L	0.005	12	7	15	8
	C	13		mg/L			3609	3965	2
	Cl	37		mg/L			2916004	3541386	1
[>	Sc	45		ug/L			282777	260338	3
[	V	51	0.464	ug/L	0.012	2	1730	6974	4
[	V-1	51	0.881	ug/L	0.002	0	3780	13901	3
[	Cr	52	U 0.225	ug/L	0.016	6	5667	7501	1
[	Cr	53	1.530	ug/L	0.048	3	1296	3062	2
[	Mn	55	3.498	ug/L	0.039	1	420	56463	4
[	Co	59	0.015	ug/L	0.001	9	50	232	9
[>	Ge	72		ug/L			391184	306623	3
[	Ni	60	U 0.062	ug/L	0.011	16	80	217	15
[	Ni	62	0.144	ug/L	0.062	43	54	95	25
[	Cu	63	0.565	ug/L	0.004	0	200	3283	4
[	Cu	65	0.395	ug/L	0.013	3	107	1128	0
[	Zn	66	U 2.999	ug/L	0.106	3	422	5214	0
[	Zn	67	2.910	ug/L	0.197	6	147	930	8
[	Zn	68	4.317	ug/L	0.221	5	6276	9987	2
[	As	75	0.851	ug/L	0.027	3	220	1774	6
[	As-1	75	1.698	ug/L	0.132	7	9042	10220	1
[	Se	82	0.077	ug/L	0.088	113	-8	7	212
[	Se	78	3.800	ug/L	0.638	16	9216	8861	1
[	Mo	98	0.971	ug/L	0.008	0	470	6705	4
	Y	89		ug/L			364750	279731	2
	Kr	83		ug/L			176	167	1
[>	In	115		ug/L			360532	309416	3
[	Ag	107	U 0.009	ug/L	0.000	4	25	120	6
[	Cd	111	U -0.004	ug/L	0.003	77	178	141	8
[	Cd	114	0.015	ug/L	0.001	8	13	102	7
[	Sb	121	U 0.048	ug/L	0.000	0	25	495	3
[	Sb	123	0.049	ug/L	0.003	5	18	388	2
[	Ba	135	3.498	ug/L	0.016	0	36	7979	3
[	Ba	137	3.525	ug/L	0.059	1	58	13935	3
[>	Tb	159		ug/L			438956	376856	4
[	Tl	205	0.004	ug/L	0.001	21	51	127	13
[	Pb	208	0.499	ug/L	0.010	2	402	15482	4
[	Bi	209		ug/L			320054	254109	2
[	Th	232	0.222	ug/L	0.002	1	58	7917	4
[	U	238	0.014	ug/L	0.001	7	29	543	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 O RHN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Friday, November 30, 2012 14:23:21
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	160673	2
[	Be	9	0.025	ug/L	0.015	60	7	10	36
	C	13		mg/L			3609	2988	1
	Cl	37		mg/L			2916004	3540922	1
[>	Sc	45		ug/L			282777	255355	3
[	V	51	0.086	ug/L	0.011	12	1730	2548	7
[	V-1	51	0.456	ug/L	0.009	1	3780	8703	2
[	Cr	52	0.140	ug/L	0.023	16	5667	6507	1
[	Cr	53	1.281	ug/L	0.068	5	1296	2703	0
[	Mn	55	1.773	ug/L	0.020	1	420	28238	2
[	Co	59	0.030	ug/L	0.002	5	50	424	6
[>	Ge	72		ug/L			391184	306635	3
[	Ni	60	0.200	ug/L	0.007	3	80	554	5
[	Ni	62	0.188	ug/L	0.031	16	54	111	7
[	Cu	63	1.805	ug/L	0.028	1	200	10145	5
[	Cu	65	1.783	ug/L	0.042	2	107	4801	4
[	Zn	66	4.835	ug/L	0.177	3	422	8216	6
[	Zn	67	4.585	ug/L	0.211	4	147	1398	5
[	Zn	68	5.912	ug/L	0.215	3	6276	11861	1
[	As	75	0.270	ug/L	0.017	6	220	679	2
[	As-1	75	1.051	ug/L	0.176	16	9042	9023	0
[	Se	82	-0.006	ug/L	0.048	800	-8	-8	107
[	Se	78	3.528	ug/L	0.741	21	9216	8742	0
[	Mo	98	0.186	ug/L	0.001	0	470	1582	3
	Y	89		ug/L			364750	272769	4
	Kr	83		ug/L			176	177	2
[>	In	115		ug/L			360532	312160	3
[	Ag	107	0.001	ug/L	0.001	45	25	37	21
[	Cd	111	0.031	ug/L	0.005	14	178	238	8
[	Cd	114	0.032	ug/L	0.004	13	13	211	15
[	Sb	121	0.032	ug/L	0.004	12	25	343	12
[	Sb	123	0.031	ug/L	0.001	2	18	249	3
[	Ba	135	2.227	ug/L	0.024	1	36	5136	4
[	Ba	137	2.246	ug/L	0.015	0	58	8972	3
[>	Tb	159		ug/L			438956	377420	4
[	Tl	205	0.002	ug/L	0.000	18	51	97	8
[	Pb	208	0.067	ug/L	0.003	5	402	2369	6
[	Bi	209		ug/L			320054	257755	3
[	Th	232	0.003	ug/L	0.000	6	58	157	5
[	U	238	0.012	ug/L	0.000	2	29	483	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 T RHN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, November 30, 2012 14:29:40
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	165140	0
[	Be	9	0.028	ug/L	0.018	64	7	11	38
	C	13		mg/L			3609	2784	0
	Cl	37		mg/L			2916004	3610123	0
[>	Sc	45		ug/L			282777	256777	1
[	V	51	0.125	ug/L	0.028	22	1730	2998	11
[	V-1	51	0.413	ug/L	0.033	7	3780	8246	3
[	Cr	52	0.131	ug/L	0.025	18	5667	6463	5
[	Cr	53	1.022	ug/L	0.085	8	1296	2408	3
[	Mn	55	11.844	ug/L	0.094	0	420	187587	0
[	Co	59	0.219	ug/L	0.006	2	50	2786	2
[>	Ge	72		ug/L			391184	307113	0
[	Ni	60	1.039	ug/L	0.020	1	80	2619	1
[	Ni	62	0.976	ug/L	0.042	4	54	404	3
[	Cu	63	0.678	ug/L	0.018	2	200	3912	2
[	Cu	65	0.721	ug/L	0.015	2	107	1996	1
[	Zn	66	114.020	ug/L	1.168	1	422	186468	1
[	Zn	67	99.028	ug/L	0.809	0	147	27867	1
[	Zn	68	110.176	ug/L	0.858	0	6276	134609	1
[	As	75	0.404	ug/L	0.016	4	220	933	2
[	As-1	75	1.211	ug/L	0.071	5	9042	9340	0
[	Se	82	0.083	ug/L	0.021	25	-8	8	47
[	Se	78	3.712	ug/L	0.305	8	9216	8842	0
[	Mo	98	0.018	ug/L	0.001	6	470	490	1
	Y	89		ug/L			364750	277181	0
	Kr	83		ug/L			176	175	5
[>	In	115		ug/L			360532	315547	2
[	Ag	107	0.002	ug/L	0.001	47	25	44	22
[	Cd	111	0.451	ug/L	0.016	3	178	1387	3
[	Cd	114	0.461	ug/L	0.012	2	13	2891	0
[	Sb	121	0.008	ug/L	0.001	7	25	97	4
[	Sb	123	0.008	ug/L	0.003	38	18	80	29
[	Ba	135	3.788	ug/L	0.095	2	36	8804	0
[	Ba	137	3.811	ug/L	0.100	2	58	15353	0
[>	Tb	159		ug/L			438956	374862	0
[	Tl	205	0.004	ug/L	0.001	16	51	126	10
[	Pb	208	0.023	ug/L	0.001	2	402	1047	2
[	Bi	209		ug/L			320054	258441	2
[	Th	232	0.003	ug/L	0.000	17	58	141	10
[	U	238	0.019	ug/L	0.001	6	29	739	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR63 W RHN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, November 30, 2012 14:35:58
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			258961	175385	0
	Be	9	0.014	ug/L	0.010	72	7	8	31
	C	13		mg/L			3609	2711	3
	Cl	37		mg/L			2916004	3673160	0
>	Sc	45		ug/L			282777	265367	1
	V	51	0.098	ug/L	0.017	17	1730	2774	5
	V-1	51	0.352	ug/L	0.013	3	3780	7790	0
	Cr	52	0.125	ug/L	0.010	8	5667	6617	1
	Cr	53	0.911	ug/L	0.022	2	1296	2351	2
	Mn	55	12.680	ug/L	0.008	0	420	207531	1
	Co	59	0.228	ug/L	0.011	4	50	2991	6
>	Ge	72		ug/L			391184	319020	3
	Ni	60	1.111	ug/L	0.088	7	80	2902	7
	Ni	62	1.035	ug/L	0.026	2	54	442	2
	Cu	63	0.576	ug/L	0.005	0	200	3478	2
	Cu	65	0.617	ug/L	0.013	2	107	1786	3
	Zn	66	123.435	ug/L	2.010	1	422	209598	1
	Zn	67	107.738	ug/L	0.488	0	147	31483	3
	Zn	68	119.760	ug/L	1.056	0	6276	151517	2
	As	75	0.106	ug/L	0.013	12	220	385	5
	As-1	75	0.758	ug/L	0.126	16	9042	8827	0
	Se	82	0.058	ug/L	0.045	77	-8	3	222
	Se	78	3.024	ug/L	0.531	17	9216	8871	0
	Mo	98	0.028	ug/L	0.005	17	470	575	8
	Y	89		ug/L			364750	286690	2
	Kr	83		ug/L			176	177	4
>	In	115		ug/L			360532	323474	2
	Ag	107	0.002	ug/L	0.001	52	25	40	23
	Cd	111	0.523	ug/L	0.019	3	178	1622	2
	Cd	114	0.507	ug/L	0.012	2	13	3258	4
	Sb	121	0.007	ug/L	0.001	16	25	95	11
	Sb	123	0.007	ug/L	0.001	7	18	73	4
	Ba	135	3.950	ug/L	0.059	1	36	9414	3
	Ba	137	3.899	ug/L	0.115	2	58	16107	3
>	Tb	159		ug/L			438956	386958	2
	Tl	205	0.004	ug/L	0.000	2	51	134	1
	Pb	208	0.012	ug/L	0.000	3	402	728	4
	Bi	209		ug/L			320054	261930	1
	Th	232	0.002	ug/L	0.000	5	58	121	4
	U	238	0.014	ug/L	0.000	3	29	549	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 14:42:18
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	178443	2
[	Be	9	55.147	ug/L	0.374	0	7	14563	2
	C	13		mg/L			3609	2409	4
	Cl	37		mg/L			2916004	3736796	0
[>	Sc	45		ug/L			282777	272359	1
[	V	51	51.259	ug/L	0.505	0	1730	623902	0
[	V-1	51	51.378	ug/L	0.277	0	3780	639323	0
[	Cr	52	50.811	ug/L	0.813	1	5667	546736	0
[	Cr	53	51.204	ug/L	0.148	0	1296	66712	1
[	Mn	55	48.253	ug/L	1.412	2	420	809236	1
[	Co	59	50.069	ug/L	0.332	0	50	664737	0
[>	Ge	72		ug/L			391184	325341	0
[	Ni	60	55.851	ug/L	0.959	1	80	145562	1
[	Ni	62	55.499	ug/L	0.287	0	54	21834	0
[	Cu	63	55.713	ug/L	0.495	0	200	327090	0
[	Cu	65	55.046	ug/L	0.990	1	107	154612	1
[	Zn	66	51.919	ug/L	0.162	0	422	90136	0
[	Zn	67	52.827	ug/L	0.266	0	147	15804	0
[	Zn	68	51.789	ug/L	0.512	0	6276	69793	0
[	As	75	50.931	ug/L	0.529	1	220	101841	1
[	As-1	75	51.644	ug/L	0.560	1	9042	108826	1
[	Se	82	46.506	ug/L	0.375	0	-8	9015	0
[	Se	78	49.312	ug/L	0.568	1	9216	30296	1
[	Mo	98	51.951	ug/L	0.556	1	470	359877	1
	Y	89		ug/L			364750	298201	0
	Kr	83		ug/L			176	172	1
[>	In	115		ug/L			360532	334326	0
[	Ag	107	48.916	ug/L	0.672	1	25	574085	1
[	Cd	111	48.179	ug/L	0.728	1	178	139569	2
[	Cd	114	48.072	ug/L	0.071	0	13	318252	0
[	Sb	121	49.480	ug/L	0.081	0	25	526084	0
[	Sb	123	48.852	ug/L	0.234	0	18	398875	0
[	Ba	135	50.078	ug/L	0.442	0	36	122967	1
[	Ba	137	49.950	ug/L	0.154	0	58	212634	0
[>	Tb	159		ug/L			438956	411361	0
[	Tl	205	47.629	ug/L	0.290	0	51	1190201	0
[	Pb	208	48.257	ug/L	0.217	0	402	1598095	0
[	Bi	209		ug/L			320054	270940	0
[	Th	232	44.249	ug/L	0.869	1	58	1711080	2
[	U	238	44.688	ug/L	0.572	1	29	1809773	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 14:48:56
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	186381	0
[	Be	9	0.021	ug/L	0.013	61	7	10	33
	C	13		mg/L			3609	3152	0
	Cl	37		mg/L			2916004	3795146	0
[>	Sc	45		ug/L			282777	278901	0
[	V	51	0.036	ug/L	0.005	13	1730	2158	2
[	V-1	51	0.181	ug/L	0.014	7	3780	6015	2
[	Cr	52	0.127	ug/L	0.006	4	5667	6979	1
[	Cr	53	0.568	ug/L	0.046	8	1296	2022	2
[	Mn	55	0.002	ug/L	0.002	111	420	441	5
[	Co	59	0.002	ug/L	0.000	18	50	73	5
[>	Ge	72		ug/L			391184	335396	1
[	Ni	60	0.007	ug/L	0.005	65	80	87	12
[	Ni	62	0.046	ug/L	0.016	34	54	65	8
[	Cu	63	0.004	ug/L	0.004	84	200	198	12
[	Cu	65	0.007	ug/L	0.005	69	107	112	13
[	Zn	66	0.048	ug/L	0.021	44	422	447	6
[	Zn	67	0.208	ug/L	0.030	14	147	190	3
[	Zn	68	0.935	ug/L	0.069	7	6276	6583	2
[	As	75	0.028	ug/L	0.003	10	220	245	1
[	As-1	75	0.518	ug/L	0.056	10	9042	8798	0
[	Se	82	0.004	ug/L	0.037	933	-8	-6	107
[	Se	78	2.205	ug/L	0.205	9	9216	8943	0
[	Mo	98	-0.040	ug/L	0.004	10	470	119	26
	Y	89		ug/L			364750	300950	0
	Kr	83		ug/L			176	173	4
[>	In	115		ug/L			360532	347360	0
[	Ag	107	0.010	ug/L	0.003	26	25	150	22
[	Cd	111	0.009	ug/L	0.004	44	178	199	6
[	Cd	114	0.002	ug/L	0.001	85	13	25	40
[	Sb	121	0.031	ug/L	0.006	18	25	371	17
[	Sb	123	0.031	ug/L	0.010	31	18	279	29
[	Ba	135	0.003	ug/L	0.001	37	36	43	7
[	Ba	137	0.006	ug/L	0.003	41	58	83	13
[>	Tb	159		ug/L			438956	427597	2
[	Tl	205	0.006	ug/L	0.003	40	51	215	32
[	Pb	208	0.006	ug/L	0.002	33	402	601	12
[	Bi	209		ug/L			320054	285383	1
[	Th	232	0.041	ug/L	0.011	26	58	1717	27
[	U	238	0.003	ug/L	0.001	48	29	135	39

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 MB2SPK REN
Sample Dil Factor: 2
Comments: Del
Sample Date/Time: Friday, November 30, 2012 14:55:40
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	179771	1
[	Be	9	27.950	ug/L	1.181	4	7	7435	3
	C	13		mg/L			3609	4745	3
	Cl	37		mg/L			2916004	3689500	0
[>	Sc	45		ug/L			282777	271990	1
[	V	51	26.989	ug/L	0.869	3	1730	328801	2
[	V-1	51	26.957	ug/L	1.074	3	3780	336647	3
[	Cr	52	26.255	ug/L	0.741	2	5667	284754	1
[	Cr	53	26.198	ug/L	1.413	5	1296	34686	4
[	Mn	55	25.530	ug/L	0.988	3	420	427769	3
[	Co	59	25.821	ug/L	1.115	4	50	342309	3
[>	Ge	72		ug/L			391184	320383	2
[	Ni	60	29.153	ug/L	1.426	4	80	74792	2
[	Ni	62	28.712	ug/L	1.415	4	54	11135	2
[	Cu	63	29.983	ug/L	1.515	5	200	173258	2
[	Cu	65	29.438	ug/L	1.815	6	107	81378	3
[	Zn	66	88.039	ug/L	4.982	5	422	150115	2
[	Zn	67	80.943	ug/L	5.295	6	147	23753	3
[	Zn	68	85.325	ug/L	3.768	4	6276	109822	1
[	As	75	27.425	ug/L	1.316	4	220	54038	2
[	As-1	75	27.136	ug/L	1.570	5	9042	59769	2
[	Se	82	76.678	ug/L	3.059	3	-8	14631	1
[	Se	78	79.223	ug/L	4.362	5	9216	43317	2
[	Mo	98	26.162	ug/L	1.625	6	470	178447	3
	Y	89		ug/L			364750	292921	1
	Kr	83		ug/L			176	175	4
[>	In	115		ug/L			360532	331714	1
[	Ag	107	24.974	ug/L	0.999	4	25	290694	2
[	Cd	111	23.853	ug/L	0.795	3	178	68616	1
[	Cd	114	23.808	ug/L	0.698	2	13	156352	1
[	Sb	121	24.899	ug/L	0.873	3	25	262605	2
[	Sb	123	24.718	ug/L	0.803	3	18	200200	2
[	Ba	135	25.913	ug/L	1.175	4	36	63119	3
[	Ba	137	25.812	ug/L	0.882	3	58	109011	1
[>	Tb	159		ug/L			438956	414052	0
[	Tl	205	24.726	ug/L	0.332	1	51	621970	1
[	Pb	208	24.799	ug/L	0.397	1	402	826810	1
[	Bi	209		ug/L			320054	277602	0
[	Th	232	23.184	ug/L	0.423	1	58	902356	1
[	U	238	22.559	ug/L	0.635	2	29	919573	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS36 C REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Friday, November 30, 2012 15:01:59
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	178623	1
[	Be	9	0.007	ug/L	0.022	314	7	6	84
	C	13		mg/L			3609	3074	0
	Cl	37		mg/L			2916004	3723544	0
[>	Sc	45		ug/L			282777	271464	0
[	V	51	0.132	ug/L	0.027	20	1730	3254	9
[	V-1	51	0.272	ug/L	0.010	3	3780	6979	1
[	Cr	52	0.197	ug/L	0.013	6	5667	7534	1
[	Cr	53	0.626	ug/L	0.072	11	1296	2042	4
[	Mn	55	9.372	ug/L	0.021	0	420	157023	0
[	Co	59	0.047	ug/L	0.000	0	50	670	0
[>	Ge	72		ug/L			391184	328104	1
[	Ni	60	0.424	ug/L	0.015	3	80	1181	3
[	Ni	62	0.477	ug/L	0.037	7	54	234	5
[	Cu	63	2.501	ug/L	0.030	1	200	14967	0
[	Cu	65	2.427	ug/L	0.014	0	107	6962	1
[	Zn	66	9.599	ug/L	0.081	0	422	17096	1
[	Zn	67	8.630	ug/L	0.123	1	147	2707	1
[	Zn	68	10.343	ug/L	0.229	2	6276	18267	0
[	As	75	0.128	ug/L	0.023	17	220	441	10
[	As-1	75	0.655	ug/L	0.054	8	9042	8880	0
[	Se	82	0.021	ug/L	0.057	269	-8	-3	328
[	Se	78	2.402	ug/L	0.225	9	9216	8841	0
[	Mo	98	0.120	ug/L	0.003	2	470	1233	1
	Y	89		ug/L			364750	288606	1
	Kr	83		ug/L			176	173	4
[>	In	115		ug/L			360532	336014	1
[	Ag	107	0.008	ug/L	0.002	22	25	118	18
[	Cd	111	0.021	ug/L	0.003	15	178	227	3
[	Cd	114	0.012	ug/L	0.002	12	13	95	11
[	Sb	121	0.098	ug/L	0.001	0	25	1066	1
[	Sb	123	0.102	ug/L	0.003	3	18	851	3
[	Ba	135	5.361	ug/L	0.062	1	36	13259	0
[	Ba	137	5.225	ug/L	0.064	1	58	22406	2
[>	Tb	159		ug/L			438956	408743	0
[	Tl	205	0.005	ug/L	0.002	43	51	164	30
[	Pb	208	0.156	ug/L	0.003	1	402	5521	1
[	Bi	209		ug/L			320054	280030	0
[	Th	232	0.028	ug/L	0.007	23	58	1145	22
[	U	238	0.004	ug/L	0.001	26	29	202	23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS44 A REN
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, November 30, 2012 15:08:16
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	173280	1
[	Be	9	0.025	ug/L	0.029	113	7	11	66
	C	13		mg/L			3609	2731	2
	Cl	37		mg/L			2916004	3749044	0
[>	Sc	45		ug/L			282777	270226	0
[	V	51	0.261	ug/L	0.010	3	1730	4794	2
[	V-1	51	0.405	ug/L	0.019	4	3780	8581	2
[	Cr	52	0.167	ug/L	0.015	8	5667	7184	2
[	Cr	53	0.618	ug/L	0.102	16	1296	2022	6
[	Mn	55	95.447	ug/L	2.161	2	420	1588048	1
[	Co	59	0.108	ug/L	0.005	4	50	1465	3
[>	Ge	72		ug/L			391184	317952	1
[	Ni	60	0.158	ug/L	0.015	9	80	469	8
[	Ni	62	0.180	ug/L	0.055	30	54	113	19
[	Cu	63	0.131	ug/L	0.003	2	200	915	3
[	Cu	65	0.136	ug/L	0.008	5	107	459	4
[	Zn	66	0.286	ug/L	0.013	4	422	826	2
[	Zn	67	0.632	ug/L	0.020	3	147	303	2
[	Zn	68	1.558	ug/L	0.135	8	6276	7000	3
[	As	75	55.694	ug/L	0.446	0	220	108811	0
[	As-1	75	57.357	ug/L	0.543	0	9042	117295	0
[	Se	82	0.059	ug/L	0.027	45	-8	3	132
[	Se	78	3.163	ug/L	0.383	12	9216	8907	0
[	Mo	98	-0.016	ug/L	0.002	14	470	276	3
	Y	89		ug/L			364750	286350	0
	Kr	83		ug/L			176	174	1
[>	In	115		ug/L			360532	328771	1
[	Ag	107	0.004	ug/L	0.001	20	25	70	12
[	Cd	111	0.011	ug/L	0.007	58	178	194	8
[	Cd	114	0.000	ug/L	0.001	214	13	15	36
[	Sb	121	0.019	ug/L	0.001	5	25	222	3
[	Sb	123	0.021	ug/L	0.001	5	18	185	4
[	Ba	135	3.602	ug/L	0.076	2	36	8727	2
[	Ba	137	3.577	ug/L	0.098	2	58	15021	1
[>	Tb	159		ug/L			438956	400637	1
[	Tl	205	0.003	ug/L	0.000	12	51	131	8
[	Pb	208	0.014	ug/L	0.000	3	402	834	0
[	Bi	209		ug/L			320054	276710	1
[	Th	232	0.016	ug/L	0.001	3	58	665	2
[	U	238	0.001	ug/L	0.000	18	29	64	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 ADUP REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Friday, November 30, 2012 15:14:33
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

RR Ba, Cu, Ni,

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	178514	1
[	Be	9	0.019	ug/L	0.021	106	7	10	54
	C	13		mg/L			3609	3128	0
	Cl	37		mg/L			2916004	3712987	0
[>	Sc	45		ug/L			282777	274436	1
[	V	51	0.263	ug/L	0.021	8	1730	4896	3
[	V-1	51	0.405	ug/L	0.016	3	3780	8715	0
[	Cr	52	u 0.247	ug/L	0.013	5	5667	8148	0
[	Cr	53	0.686	ug/L	0.039	5	1296	2142	2
[	Mn	55	22.505	ug/L	1.395	6	420	380355	4
[	Co	59	0.036	ug/L	0.000	1	50	534	0
[>	Ge	72		ug/L			391184	325751	1
[	Ni	60	0.388	ug/L	0.017	4	80	1079	3
[	Ni	62	0.381	ug/L	0.015	3	54	195	1
[	Cu	63	0.688	ug/L	0.035	5	200	4208	4
[	Cu	65	0.677	ug/L	0.036	5	107	1991	4
[	Zn	66	u 0.947	ug/L	0.045	4	422	1991	4
[	Zn	67	1.099	ug/L	0.080	7	147	449	4
[	Zn	68	2.001	ug/L	0.032	1	6276	7724	1
[	As	75	0.319	ug/L	0.013	4	220	820	2
[	As-1	75	0.895	ug/L	0.040	4	9042	9287	0
[	Se	82	u 0.086	ug/L	0.030	35	-8	9	62
[	Se	78	2.640	ug/L	0.178	6	9216	8886	0
[	Mo	98	0.016	ug/L	0.004	25	470	503	6
	Y	89		ug/L			364750	297332	1
	Kr	83		ug/L			176	168	0
[>	In	115		ug/L			360532	336007	2
[	Ag	107	u 0.006	ug/L	0.001	11	25	94	8
[	Cd	111	u 0.016	ug/L	0.008	51	178	213	13
[	Cd	114	0.006	ug/L	0.001	23	13	50	15
[	Sb	121	u 0.049	ug/L	0.004	7	25	551	4
[	Sb	123	0.049	ug/L	0.003	6	18	415	4
[	Ba	135	2.197	ug/L	0.158	7	36	5448	5
[	Ba	137	2.183	ug/L	0.140	6	58	9384	4
[>	Tb	159		ug/L			438956	412379	0
[	Tl	205	u 0.004	ug/L	0.000	8	51	137	5
[	Pb	208	0.108	ug/L	0.006	5	402	3965	4
[	Bi	209		ug/L			320054	283133	1
[	Th	232	0.015	ug/L	0.002	12	58	641	11
[	U	238	0.005	ug/L	0.001	16	29	242	14

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 A REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Friday, November 30, 2012 15:20:50
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

RR Be, Cu, Ni

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			258961	177609	1
	Be	9	0.021	ug/L	0.024	112	7	10	60
	C	13		mg/L			3609	3066	3
	Cl	37		mg/L			2916004	3724973	0
>	Sc	45		ug/L			282777	268469	1
	V	51	0.298	ug/L	0.010	3	1730	5213	1
	V-1	51	0.425	ug/L	0.003	0	3780	8770	1
	Cr	52	u 0.271	ug/L	0.005	1	5667	8221	0
	Cr	53	0.663	ug/L	0.035	5	1296	2066	3
	Mn	55	22.157	ug/L	0.144	0	420	366590	1
	Co	59	0.035	ug/L	0.001	3	50	506	2
>	Ge	72		ug/L			391184	324371	1
	Ni	60	0.371	ug/L	0.014	3	80	1030	1
	Ni	62	0.341	ug/L	0.025	7	54	178	4
	Cu	63	0.791	ug/L	0.030	3	200	4790	1
	Cu	65	0.780	ug/L	0.009	1	107	2272	1
	Zn	66	u 0.904	ug/L	0.050	5	422	1908	4
	Zn	67	1.030	ug/L	0.036	3	147	427	0
	Zn	68	1.955	ug/L	0.082	4	6276	7633	0
	As	75	0.312	ug/L	0.007	2	220	803	2
	As-1	75	0.886	ug/L	0.108	12	9042	9228	0
	Se	82	u 0.041	ug/L	0.043	104	-8	0	1474
	Se	78	2.628	ug/L	0.471	17	9216	8841	0
	Mo	98	0.014	ug/L	0.003	23	470	487	3
	Y	89		ug/L			364750	288547	1
	Kr	83		ug/L			176	175	2
>	In	115		ug/L			360532	330566	0
	Ag	107	u 0.004	ug/L	0.001	17	25	64	11
	Cd	111	u 0.009	ug/L	0.004	46	178	189	5
	Cd	114	0.004	ug/L	0.001	29	13	37	19
	Sb	121	0.046	ug/L	0.003	7	25	507	6
	Sb	123	0.046	ug/L	0.002	5	18	390	4
	Ba	135	2.185	ug/L	0.040	1	36	5336	1
	Ba	137	2.217	ug/L	0.048	2	58	9383	1
>	Tb	159		ug/L			438956	404063	1
	Tl	205	u 0.003	ug/L	0.001	21	51	120	13
	Pb	208	0.104	ug/L	0.002	2	402	3763	3
	Bi	209		ug/L			320054	277440	1
	Th	232	0.009	ug/L	0.001	7	58	396	7
	U	238	0.005	ug/L	0.000	3	29	229	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 ASPK REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Friday, November 30, 2012 15:27:06
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

RR Be, Cu, Ni

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	183715	1
[	Be	9	5.569	ug/L	0.184	3	7	1518	3
	C	13		mg/L			3609	3099	2
	Cl	37		mg/L			2916004	3762035	0
[>	Sc	45		ug/L			282777	283440	2
|	V	51	5.477	ug/L	0.115	2	1730	70905	1
|	V-1	51	5.551	ug/L	0.164	2	3780	75234	1
|	Cr	52	5.470	ug/L	0.030	0	5667	66333	2
|	Cr	53	5.700	ug/L	0.191	3	1296	8880	2
|	Mn	55	26.965	ug/L	0.428	1	420	470786	1
[	Co	59	5.212	ug/L	0.090	1	50	72034	1
[>	Ge	72		ug/L			391184	334467	2
|	Ni	60	6.251	ug/L	0.023	0	80	16810	2
|	Ni	62	6.267	ug/L	0.211	3	54	2574	2
|	Cu	63	6.469	ug/L	0.096	1	200	39189	1
|	Cu	65	6.452	ug/L	0.211	3	107	18706	2
|	Zn	66	18.565	ug/L	0.138	0	422	33364	1
|	Zn	67	16.844	ug/L	0.576	3	147	5266	3
|	Zn	68	18.620	ug/L	0.669	3	6276	29221	0
|	As	75	5.798	ug/L	0.077	1	220	12083	1
|	As-1	75	6.168	ug/L	0.119	1	9042	20166	1
|	Se	82	15.584	ug/L	0.072	0	-8	3100	1
|	Se	78	17.994	ug/L	0.330	1	9216	16367	1
[	Mo	98	5.174	ug/L	0.074	1	470	37202	1
	Y	89		ug/L			364750	303874	2
	Kr	83		ug/L			176	173	6
[>	In	115		ug/L			360532	345517	0
|	Ag	107	4.870	ug/L	0.156	3	25	59097	3
|	Cd	111	4.753	ug/L	0.108	2	178	14383	2
|	Cd	114	4.821	ug/L	0.113	2	13	32995	2
|	Sb	121	4.865	ug/L	0.087	1	25	53485	2
|	Sb	123	4.891	ug/L	0.080	1	18	41291	1
|	Ba	135	7.468	ug/L	0.137	1	36	18978	1
[	Ba	137	7.493	ug/L	0.070	0	58	33011	0
[>	Tb	159		ug/L			438956	424242	0
|	Tl	205	4.935	ug/L	0.102	2	51	127242	2
|	Pb	208	5.066	ug/L	0.085	1	402	173365	1
|	Bi	209		ug/L			320054	285936	2
|	Th	232	4.184	ug/L	0.127	3	58	166906	3
[	U	238	4.505	ug/L	0.105	2	29	188191	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 B REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Friday, November 30, 2012 15:33:22
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

RR Be, Cu, Ni

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	179051	0
[	Be	9	0.007	ug/L	0.014	204	7	6	54
	C	13		mg/L			3609	3127	0
	Cl	37		mg/L			2916004	3702245	0
[>	Sc	45		ug/L			282777	273177	1
[	V	51	0.240	ug/L	0.008	3	1730	4593	3
[	V-1	51	0.357	ug/L	0.019	5	3780	8089	3
[	Cr	52	U 0.216	ug/L	0.009	4	5667	7784	1
[	Cr	53	0.581	ug/L	0.033	5	1296	1997	3
[	Mn	55	6.496	ug/L	0.149	2	420	109668	3
[	Co	59	0.021	ug/L	0.002	9	50	334	9
[>	Ge	72		ug/L			391184	323231	0
[	Ni	60	0.321	ug/L	0.012	3	80	898	3
[	Ni	62	0.341	ug/L	0.026	7	54	177	5
[	Cu	63	0.623	ug/L	0.008	1	200	3798	1
[	Cu	65	0.613	ug/L	0.017	2	107	1798	2
[	Zn	66	U 0.623	ug/L	0.013	2	422	1420	1
[	Zn	67	0.806	ug/L	0.064	7	147	359	5
[	Zn	68	1.672	ug/L	0.093	5	6276	7257	1
[	As	75	0.323	ug/L	0.005	1	220	821	1
[	As-1	75	0.923	ug/L	0.008	0	9042	9270	0
[	Se	82	U -0.006	ug/L	0.015	242	-8	-8	33
[	Se	78	2.727	ug/L	0.058	2	9216	8858	0
[	Mo	98	0.012	ug/L	0.005	41	470	473	7
	Y	89		ug/L			364750	295145	0
	Kr	83		ug/L			176	181	2
[>	In	115		ug/L			360532	331989	1
[	Ag	107	U 0.005	ug/L	0.000	6	25	84	3
[	Cd	111	U 0.009	ug/L	0.003	31	178	189	2
[	Cd	114	0.002	ug/L	0.001	48	13	25	23
[	Sb	121	U 0.044	ug/L	0.001	2	25	487	2
[	Sb	123	0.045	ug/L	0.001	1	18	385	1
[	Ba	135	1.877	ug/L	0.035	1	36	4609	2
[	Ba	137	1.884	ug/L	0.047	2	58	8016	3
[>	Tb	159		ug/L			438956	404445	1
[	Tl	205	U 0.004	ug/L	0.000	7	51	140	3
[	Pb	208	U 0.066	ug/L	0.001	1	402	2514	0
[	Bi	209		ug/L			320054	272939	0
[	Th	232	0.017	ug/L	0.002	11	58	702	11
[	U	238	0.005	ug/L	0.000	9	29	229	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VQ39 A RHN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Friday, November 30, 2012 15:39:39
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	180266	0
[	Be	9	0.025	ug/L	0.010	39	7	11	22
	C	13		mg/L			3609	3308	3
	Cl	37		mg/L			2916004	3721083	0
[>	Sc	45		ug/L			282777	273078	0
[	V	51	0.224	ug/L	0.009	4	1730	4402	3
[	V-1	51	0.335	ug/L	0.006	1	3780	7807	1
[	Cr	52	0.137	ug/L	0.007	4	5667	6932	1
[	Cr	53	0.484	ug/L	0.020	4	1296	1872	1
[	Mn	55	4.045	ug/L	0.057	1	420	68410	1
[	Co	59	0.060	ug/L	0.002	3	50	842	4
[>	Ge	72		ug/L			391184	328878	0
[	Ni	60	0.244	ug/L	0.011	4	80	710	3
[	Ni	62	0.246	ug/L	0.018	7	54	143	5
[	Cu	63	1.275	ug/L	0.005	0	200	7729	0
[	Cu	65	1.268	ug/L	0.020	1	107	3688	1
[	Zn	66	5.580	ug/L	0.110	1	422	10110	1
[	Zn	67	5.043	ug/L	0.159	3	147	1637	3
[	Zn	68	6.304	ug/L	0.130	2	6276	13221	0
[	As	75	0.466	ug/L	0.014	2	220	1126	2
[	As-1	75	1.041	ug/L	0.033	3	9042	9666	0
[	Se	82	-0.009	ug/L	0.016	181	-8	-9	34
[	Se	78	2.575	ug/L	0.138	5	9216	8942	0
[	Mo	98	0.318	ug/L	0.008	2	470	2617	2
	Y	89		ug/L			364750	293901	0
	Kr	83		ug/L			176	180	2
[>	In	115		ug/L			360532	334685	0
[	Ag	107	0.004	ug/L	0.001	24	25	69	16
[	Cd	111	0.039	ug/L	0.006	14	178	277	5
[	Cd	114	0.033	ug/L	0.002	6	13	230	6
[	Sb	121	0.042	ug/L	0.002	4	25	471	4
[	Sb	123	0.043	ug/L	0.001	2	18	369	3
[	Ba	135	2.732	ug/L	0.072	2	36	6746	2
[	Ba	137	2.661	ug/L	0.008	0	58	11389	0
[>	Tb	159		ug/L			438956	405776	0
[	Tl	205	0.003	ug/L	0.000	10	51	123	5
[	Pb	208	0.060	ug/L	0.002	3	402	2337	3
[	Bi	209		ug/L			320054	277344	0
[	Th	232	0.010	ug/L	0.001	5	58	450	4
[	U	238	0.022	ug/L	0.001	4	29	911	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT20 A REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, November 30, 2012 15:45:58
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	183912	2
[	Be	9	0.017	ug/L	0.015	88	7	9	39
	C	13		mg/L			3609	2663	0
	Cl	37		mg/L			2916004	3794508	0
[>	Sc	45		ug/L			282777	279011	2
[	V	51	1.205	ug/L	0.041	3	1730	16702	5
[	V-1	51	1.336	ug/L	0.015	1	3780	20660	1
[	Cr	52	2.634	ug/L	0.046	1	5667	34341	3
[	Cr	53	2.955	ug/L	0.142	4	1296	5146	1
[	Mn	55	34.133	ug/L	0.578	1	420	586664	2
[	Co	59	0.414	ug/L	0.012	2	50	5686	5
[>	Ge	72		ug/L			391184	334843	2
[	Ni	60	3.076	ug/L	0.036	1	80	8315	1
[	Ni	62	3.194	ug/L	0.099	3	54	1336	2
[	Cu	63	15.369	ug/L	0.127	0	200	92999	2
[	Cu	65	15.349	ug/L	0.186	1	107	44435	2
[	Zn	66	163.669	ug/L	1.076	0	422	291679	2
[	Zn	67	142.302	ug/L	1.924	1	147	43597	1
[	Zn	68	155.863	ug/L	0.754	0	6276	205379	1
[	As	75	0.250	ug/L	0.041	16	220	700	9
[	As-1	75	0.786	ug/L	0.124	15	9042	9323	0
[	Se	82	0.057	ug/L	0.116	202	-8	3	636
[	Se	78	2.438	ug/L	0.446	18	9216	9037	0
[	Mo	98	1.349	ug/L	0.037	2	470	10011	3
	Y	89		ug/L			364750	299933	1
	Kr	83		ug/L			176	171	3
[>	In	115		ug/L			360532	332317	2
[	Ag	107	0.028	ug/L	0.001	4	25	349	2
[	Cd	111	0.324	ug/L	0.021	6	178	1096	8
[	Cd	114	0.302	ug/L	0.001	0	13	1997	2
[	Sb	121	0.341	ug/L	0.012	3	25	3624	4
[	Sb	123	0.334	ug/L	0.008	2	18	2723	0
[	Ba	135	7.594	ug/L	0.163	2	36	18569	4
[	Ba	137	7.683	ug/L	0.173	2	58	32565	4
[>	Tb	159		ug/L			438956	413582	2
[	Tl	205	0.004	ug/L	0.001	20	51	140	14
[	Pb	208	15.141	ug/L	0.139	0	402	504436	3
[	Bi	209		ug/L			320054	282775	2
[	Th	232	0.020	ug/L	0.001	6	58	837	5
[	U	238	0.007	ug/L	0.000	6	29	332	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR65 B SWN
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, November 30, 2012 15:52:18
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	186764	1
[	Be	9	0.052	ug/L	0.007	13	7	19	9
	C	13		mg/L			3609	2994	1
	Cl	37		mg/L			2916004	3748755	0
[>	Sc	45		ug/L			282777	295280	0
[	V	51	19.552	ug/L	0.301	1	1730	259124	0
[	V-1	51	19.316	ug/L	0.345	1	3780	263039	1
[	Cr	52	3.397	ug/L	0.009	0	5667	45162	0
[	Cr	53	3.609	ug/L	0.169	4	1296	6355	3
[	Mn	55	66.444	ug/L	0.081	0	420	1208238	0
[	Co	59	0.333	ug/L	0.006	1	50	4847	1
[>	Ge	72		ug/L			391184	335714	0
[	Ni	60	0.639	ug/L	0.011	1	80	1787	1
[	Ni	62	2.657	ug/L	0.102	3	54	1122	2
[	Cu	63	82.603	ug/L	1.201	1	200	500326	1
[	Cu	65	82.746	ug/L	1.628	1	107	239783	2
[	Zn	66	54.230	ug/L	0.931	1	422	97128	1
[	Zn	67	53.699	ug/L	1.040	1	147	16576	2
[	Zn	68	55.824	ug/L	1.126	2	6276	77202	1
[	As	75	0.403	ug/L	0.020	5	220	1018	3
[	As-1	75	0.822	ug/L	0.043	5	9042	9423	0
[	Se	82	3.603	ug/L	0.099	2	-8	713	1
[	Se	78	5.785	ug/L	0.248	4	9216	10648	0
[	Mo	98	6.376	ug/L	0.135	2	470	45932	2
	Y	89		ug/L			364750	302798	0
	Kr	83		ug/L			176	181	6
[>	In	115		ug/L			360532	362742	1
[	Ag	107	0.927	ug/L	0.019	2	25	11831	0
[	Cd	111	u0.036	ug/L	0.005	15	178	290	4
[	Cd	114	0.038	ug/L	0.001	3	13	288	3
[	Sb	121	u0.006	ug/L	0.001	16	25	100	12
[	Sb	123	0.006	ug/L	0.001	21	18	70	14
[	Ba	135	91.840	ug/L	0.456	0	36	244645	1
[	Ba	137	90.885	ug/L	1.772	1	58	419697	1
[>	Tb	159		ug/L			438956	412970	0
[	Tl	205	0.317	ug/L	0.002	0	51	7995	0
[	Pb	208	14.018	ug/L	0.034	0	402	466316	0
[	Bi	209		ug/L			320054	311161	0
[	Th	232	0.180	ug/L	0.005	2	58	7026	2
[	U	238	0.084	ug/L	0.002	2	29	3431	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 15:58:38
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			258961	184418	1
[	Be	9	55.194	ug/L	0.251	0	7	15062	1
	C	13		mg/L			3609	2471	3
	Cl	37		mg/L			2916004	3837008	0
[>	Sc	45		ug/L			282777	272681	2
[	V	51	52.531	ug/L	0.698	1	1730	640094	1
[	V-1	51	52.366	ug/L	0.723	1	3780	652275	1
[	Cr	52	51.512	ug/L	0.515	0	5667	554869	1
[	Cr	53	51.059	ug/L	0.606	1	1296	66595	1
[	Mn	55	49.384	ug/L	0.724	1	420	829214	0
[	Co	59	51.291	ug/L	0.630	1	50	681821	2
[>	Ge	72		ug/L			391184	328315	1
[	Ni	60	55.298	ug/L	0.356	0	80	145439	1
[	Ni	62	54.851	ug/L	0.620	1	54	21779	2
[	Cu	63	55.537	ug/L	0.488	0	200	329010	0
[	Cu	65	54.641	ug/L	0.187	0	107	154878	1
[	Zn	66	52.088	ug/L	0.419	0	422	91251	0
[	Zn	67	52.722	ug/L	0.640	1	147	15915	0
[	Zn	68	52.231	ug/L	0.398	0	6276	70983	0
[	As	75	51.118	ug/L	0.196	0	220	103145	1
[	As-1	75	51.829	ug/L	0.325	0	9042	110182	0
[	Se	82	46.599	ug/L	0.520	1	-8	9116	2
[	Se	78	49.434	ug/L	0.434	0	9216	30628	0
[	Mo	98	51.177	ug/L	1.171	2	470	357684	0
	Y	89		ug/L			364750	293032	1
	Kr	83		ug/L			176	182	0
[>	In	115		ug/L			360532	336311	1
[	Ag	107	48.447	ug/L	0.353	0	25	571906	0
[	Cd	111	47.862	ug/L	0.032	0	178	139469	1
[	Cd	114	47.800	ug/L	0.273	0	13	318319	0
[	Sb	121	48.780	ug/L	0.180	0	25	521711	1
[	Sb	123	48.814	ug/L	0.510	1	18	400912	0
[	Ba	135	49.717	ug/L	0.181	0	36	122795	1
[	Ba	137	49.317	ug/L	0.625	1	58	211169	0
[>	Tb	159		ug/L			438956	407675	0
[	Tl	205	47.936	ug/L	1.156	2	51	1187294	3
[	Pb	208	48.527	ug/L	0.541	1	402	1592559	0
[	Bi	209		ug/L			320054	275148	1
[	Th	232	44.968	ug/L	0.423	0	58	1723163	1
[	U	238	45.478	ug/L	1.225	2	29	1824933	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, November 30, 2012 16:05:16
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\113012.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			258961	185650	0
	Be	9	0.007	ug/L	0.016	219	7	7	61
	C	13		mg/L			3609	3112	1
	Cl	37		mg/L			2916004	3823936	0
>	Sc	45		ug/L			282777	278042	0
	V	51	0.032	ug/L	0.009	28	1730	2101	4
	V-1	51	0.121	ug/L	0.005	4	3780	5246	1
	Cr	52	0.104	ug/L	0.008	8	5667	6699	2
	Cr	53	0.374	ug/L	0.038	10	1296	1762	3
	Mn	55	0.001	ug/L	0.001	89	420	426	3
	Co	59	0.001	ug/L	0.000	32	50	66	8
>	Ge	72		ug/L			391184	329811	0
	Ni	60	0.017	ug/L	0.003	19	80	112	7
	Ni	62	0.073	ug/L	0.029	40	54	74	15
	Cu	63	0.009	ug/L	0.001	17	200	219	3
	Cu	65	0.013	ug/L	0.003	21	107	127	5
	Zn	66	0.030	ug/L	0.014	48	422	408	5
	Zn	67	0.149	ug/L	0.028	18	147	169	4
	Zn	68	1.002	ug/L	0.099	9	6276	6558	2
	As	75	0.050	ug/L	0.012	23	220	286	7
	As-1	75	0.635	ug/L	0.017	2	9042	8886	0
	Se	82	0.070	ug/L	0.040	58	-8	6	128
	Se	78	2.678	ug/L	0.044	1	9216	9015	0
	Mo	98	-0.042	ug/L	0.002	4	470	99	14
	Y	89		ug/L			364750	296963	0
	Kr	83		ug/L			176	169	5
>	In	115		ug/L			360532	335063	0
	Ag	107	0.009	ug/L	0.003	33	25	128	27
	Cd	111	0.007	ug/L	0.009	125	178	185	13
	Cd	114	0.001	ug/L	0.000	32	13	21	13
	Sb	121	0.030	ug/L	0.005	16	25	339	14
	Sb	123	0.030	ug/L	0.009	29	18	260	27
	Ba	135	0.004	ug/L	0.003	73	36	44	17
	Ba	137	0.006	ug/L	0.002	34	58	78	9
>	Tb	159		ug/L			438956	409485	0
	Tl	205	0.005	ug/L	0.001	26	51	183	20
	Pb	208	0.005	ug/L	0.001	23	402	553	8
	Bi	209		ug/L			320054	282179	0
	Th	232	0.037	ug/L	0.007	19	58	1478	19
	U	238	0.002	ug/L	0.001	26	29	103	20

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 12-4-12 **Analyst:** BA **Page:** 1 of 3

All corrections made by analyst unless otherwise noted. BA 12-5-12

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD 0			2994-2
		1			2996-1
		2			↓ -2
		3			2995-11
		4			2996-3
		Rinse sample			
		ICV			2955-7
		ICB			
		CCV1			
		CCB1			
		Low Check			mod (NR)
		ICSA			
		ICSAB			62 Ni, 121.4%
		LR200			
		LR300			
		CCV2			
		CCB2			
		VT41 MB2	REN	2	Cr(0.965ug/L) -A.N.
		VS42R MB	↓	↓	Cu
		DI Check			✓
		ERA P197			✓
		VR80 ADUP	REN	5	Be Cu Ni
		↓ A	↓	↓	✓ ↓
		↓ ASPK	↓	↓	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 12-4-12 **Analyst:** BA **Page:** 2 of 3

All corrections made by analyst unless otherwise noted. BA 12/5/12

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		VR80 B	REN	5	BeCuNi
✓		VS42R mBSPK	↓	2 ✓	Cu
		VR80 mB2SPK	↓	↓ ✓	Be
		CCV3			
		CCB3			End Pkg
		VU47 MB	REN	2	
		VS42R A	✓		
		B			
		C			
		D			
		E			
		F			
		BA 12/5/12 ~~VS~~ VU47 A			
		B			
		mBSPK	↓	↓ ✓	
		CCV4			
		CCB4			
		VU18 MB	REN	2	
		VU22 MB	↓		
		VU47 C			
		D			
	✓	E			As > LR (try SOx)
	✓	F			✓ for CO
		VU22 ADUP	↓	↓ ✓	

12/12/12

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP (ICP-MS) GFA CVA

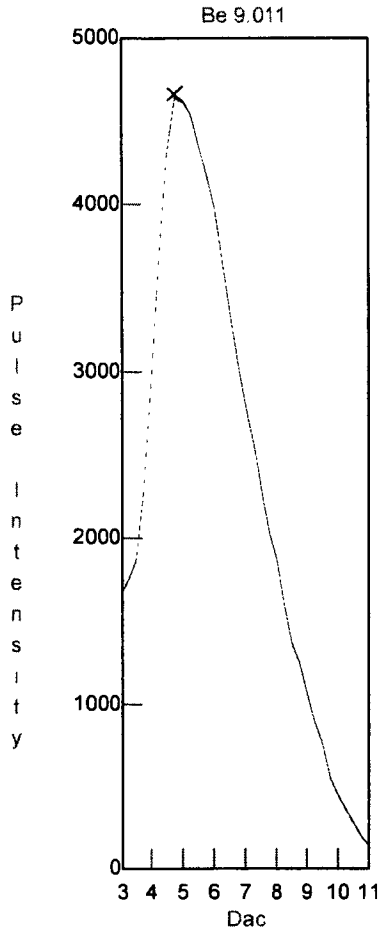
Analysis Date: 12-4-12

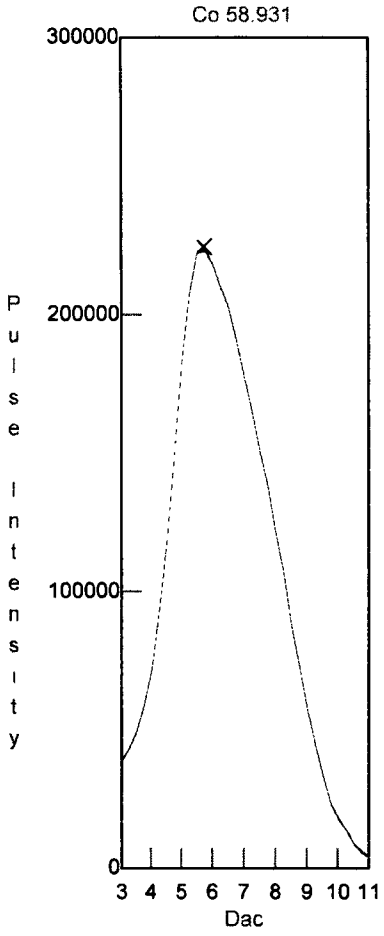
MS-1	Analyst BA 12/5/12	Peer HCZ-6-12 / SL	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	Sea log ↓
ICB/CCB	✓	✓	
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	Sea log ↓
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	Sea log ↓
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	VT41
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's	✓	✓	AN-VT41

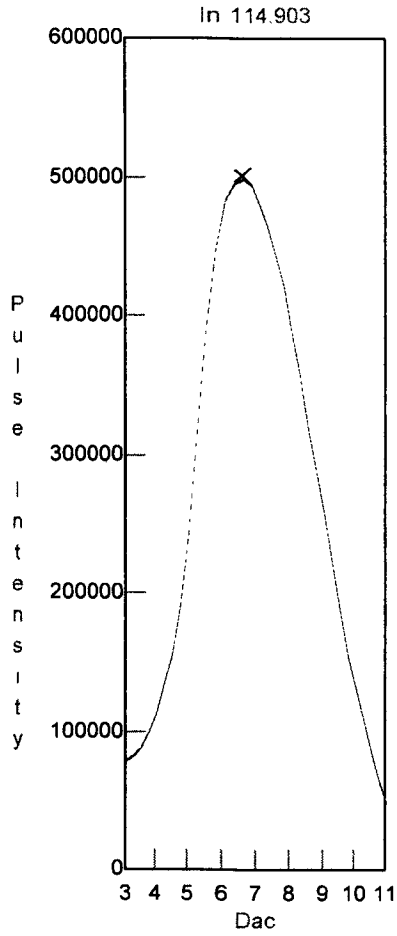
Instrument Tuning Report

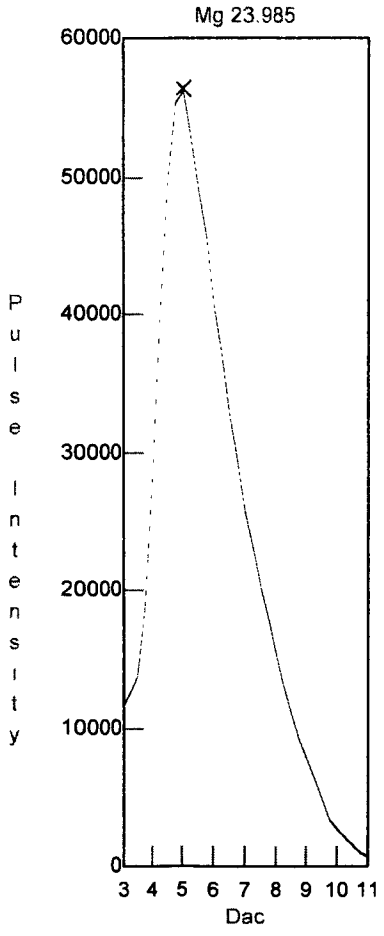
File Name: Default.tun
File Path: C:\Elandata\Tuning\Default.tun

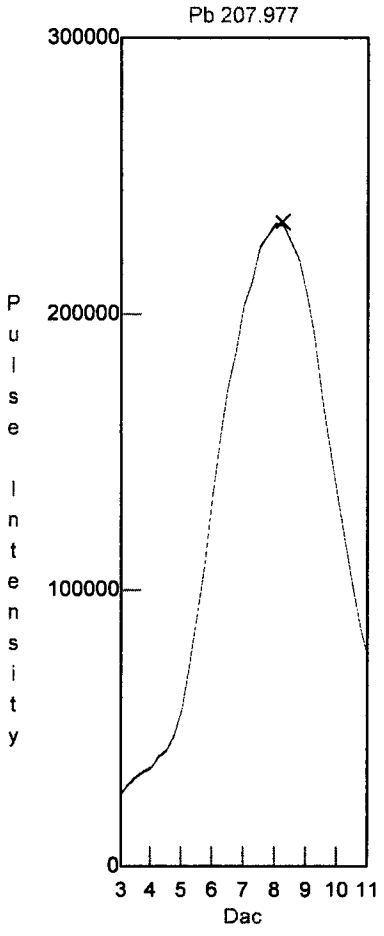
Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	9.025	2031	2158	0.707	
Mg	23.985	23.979	5664	2265	0.701	
Co	58.933	58.879	14146	2532	0.698	
In	114.904	114.878	27788	2979	0.690	
Pb	207.977	207.976	50442	3725	0.697	

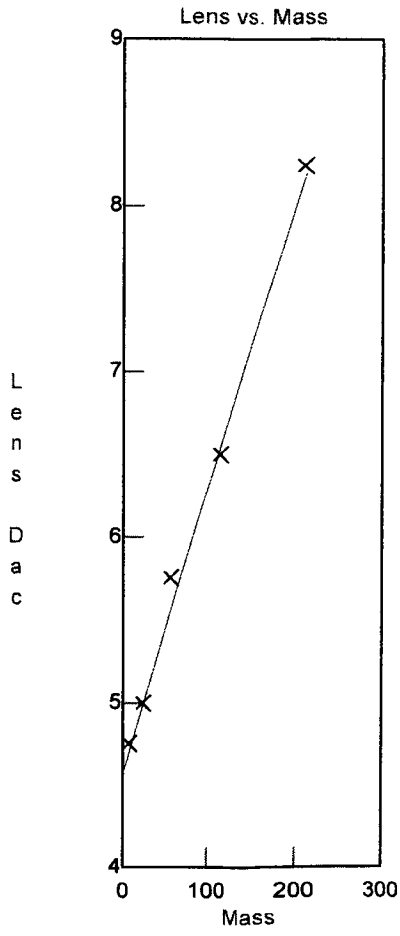

Be 9.011
Pulse Intensity
5000
4000
3000
2000
1000
0
3 4 5 6 7 8 9 10 11
Dac


Co 58.931
Pulse Intensity
300000
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac


In 114.903
Pulse Intensity
600000
500000
400000
300000
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac


Mg 23.985
Pulse Intensity
60000
50000
40000
30000
20000
10000
0
3 4 5 6 7 8 9 10 11
Dac


Pb 207.977
Pulse Intensity
300000
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac


Lens vs. Mass
Lens Dac
9
8
7
6
5
4
0
100
200
300
Mass

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Tuesday, December 04, 2012 08:32:20
Sample Description:
Sample File: 1119.sam
Method File: C:\Elandata\Method\aridailyperf.mth
Dataset File: C:\Elandata\Dataset\daily performance\Sample.1215
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\Default.dac
Number of Replicates: 5
Dual Detector Mode: Dual

0.90

Summary

	Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24	44597.076	339.030	0.760
	In	115	451780.737	2912.382	0.645
	Pb	208	243356.399	3177.568	1.306
⌈>	Ba	138	318341.697	1805.659	0.567
⌊	Ba++	69	0.014	0.000	1.511
⌈>	Ce	140	379586.144	1244.131	0.328
⌊	CeO	156	0.030	0.001	4.219
	Bkgd	220	18.252	6.163	33.764

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 09:03:21
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120312.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas Intens.	Intens. RSD
>	Li	6		ug/L				300527	0
	Be	9		ug/L				5	86
	C	13		mg/L				5087	0
	Cl	37		mg/L				2101848	0
>	Sc	45		ug/L				261601	1
	V	51		ug/L				2510	3
	V-1	51		ug/L				1782	6
	Cr	52		ug/L				7847	0
	Cr	53		ug/L				654	8
	Mn	55		ug/L				312	8
	Co	59		ug/L				47	14
>	Ge	72		ug/L				361384	1
	Ni	60		ug/L				79	8
	Ni	62		ug/L				55	15
	Cu	63		ug/L				184	12
	Cu	65		ug/L				87	12
	Zn	66		ug/L				440	3
	Zn	67		ug/L				112	19
	Zn	68		ug/L				8394	1
	As	75		ug/L				103	22
	As-1	75		ug/L				11434	0
	Se	82		ug/L				1	394
	Se	78		ug/L				11678	0
	Mo	98		ug/L				996	8
	Y	89		ug/L				360432	0
	Kr	83		ug/L				150	4
>	In	115		ug/L				393026	1
	Ag	107		ug/L				26	19
	Cd	111		ug/L				183	6
	Cd	114		ug/L				9	42
	Sb	121		ug/L				17	25
	Sb	123		ug/L				14	34
	Ba	135		ug/L				33	20
	Ba	137		ug/L				61	21
>	Tb	159		ug/L				440370	0
	Tl	205		ug/L				35	10
	Pb	208		ug/L				412	6
	Bi	209		ug/L				343603	0
	Th	232		ug/L				145	6
	U	238		ug/L				44	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 09:09:30
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120312.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
⌈>	**Li**	**6**		ug/L			300527	303034	1
⌊	**Be**	**9**	**10.000**	ug/L	0 151	1	5	4085	1
	C	**13**		mg/L			5087	4166	1
	Cl	**37**		mg/L			2101848	2129580	0
⌈>	**Sc**	**45**		ug/L			261601	264058	1
⌈	**V**	**51**	**10.000**	ug/L	0.072	0	2510	124699	1
⌈	**V-1**	**51**	**10.000**	ug/L	0 117	1	1782	126855	1
⌈	**Cr**	**52**	**10.000**	ug/L	0 061	0	7847	116145	1
⌈	**Cr**	**53**	**10.000**	ug/L	0 169	1	654	13813	0
⌈	**Mn**	**55**	**10.000**	ug/L	0 092	0	312	184186	1
⌊	**Co**	**59**	**10.000**	ug/L	0 111	1	47	150044	2
⌈>	**Ge**	**72**		ug/L			361384	365704	1
⌈	**Ni**	**60**	**10.000**	ug/L	0.221	2	79	32563	1
⌈	**Ni**	**62**	**10.000**	ug/L	0.105	1	55	4923	0
⌈	**Cu**	**63**	**10.000**	ug/L	0.098	0	184	72945	0
⌈	**Cu**	**65**	**10.000**	ug/L	0.043	0	87	34721	0
⌈	**Zn**	**66**	**10.000**	ug/L	0 083	0	440	22189	1
⌈	**Zn**	**67**	**10.000**	ug/L	0 254	2	112	3696	1
⌈	**Zn**	**68**	**10.000**	ug/L	0 079	0	8394	23966	1
⌈	**As**	**75**	**10.000**	ug/L	0.115	1	103	22094	1
⌈	**As-1**	**75**	**10.000**	ug/L	0 129	1	11434	32986	0
⌈	**Se**	**82**	**10.000**	ug/L	0 119	1	1	2538	1
⌈	**Se**	**78**	**10.000**	ug/L	0.245	2	11678	17697	0
⌊	**Mo**	**98**	**10.000**	ug/L	0.108	1	996	82876	0
	Y	**89**		ug/L			360432	365059	0
	Kr	**83**		ug/L			150	156	7
⌈>	**In**	**115**		ug/L			393026	391196	1
⌈	**Ag**	**107**	**10.000**	ug/L	0 119	1	26	137799	0
⌈	**Cd**	**111**	**10.000**	ug/L	0 238	2	183	33440	1
⌈	**Cd**	**114**	**10.000**	ug/L	0.196	1	9	77735	0
⌈	**Sb**	**121**	**10.000**	ug/L	0.068	0	17	104404	1
⌈	**Sb**	**123**	**10.000**	ug/L	0.136	1	14	78579	0
⌈	**Ba**	**135**	**10.000**	ug/L	0 057	0	33	25395	1
⌊	**Ba**	**137**	**10.000**	ug/L	0 103	1	61	43779	1
⌈>	**Tb**	**159**		ug/L			440370	441284	0
⌈	**Tl**	**205**	**10.000**	ug/L	0.044	0	35	297651	0
⌈	**Pb**	**208**	**10.000**	ug/L	0.078	0	412	408787	0
⌈	**Bi**	**209**		ug/L			343603	346554	0
⌈	**Th**	**232**	**10.000**	ug/L	0 027	0	145	466097	0
⌊	**U**	**238**	**10.000**	ug/L	0.063	0	44	524183	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 09:15:38
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120312.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc RSD	Blank Intens.	Meas Intens.	Intens. RSD
[>	Li	6		ug/L			300527	297394	2
L	Be	9	20.062	ug/L	0 609	3	5	8135	1
	C	13		mg/L			5087	3971	2
	Cl	37		mg/L			2101848	2120076	0
[>	Sc	45		ug/L			261601	263625	0
|	V	51	19.942	ug/L	0.018	0	2510	242984	0
|	V-1	51	19.919	ug/L	0 109	0	1782	246515	0
|	Cr	52	20.053	ug/L	0 254	1	7847	226911	1
|	Cr	53	19.976	ug/L	0.213	1	654	26770	0
|	Mn	55	19.904	ug/L	0.141	0	312	358879	0
L	Co	59	19.926	ug/L	0.475	2	47	294059	2
[>	Ge	72		ug/L			361384	361040	0
|	Ni	60	19.987	ug/L	0.229	1	79	64007	0
|	Ni	62	19.981	ug/L	0 104	0	55	9621	1
|	Cu	63	20.020	ug/L	0 216	1	184	144582	1
|	Cu	65	20.019	ug/L	0 110	0	87	68801	0
|	Zn	66	19.943	ug/L	0.292	1	440	42771	1
|	Zn	67	20.088	ug/L	0 498	2	112	7345	2
|	Zn	68	19.966	ug/L	0.115	0	8394	38672	0
|	As	75	20.028	ug/L	0.100	0	103	43823	0
|	As-1	75	20.024	ug/L	0 130	0	11434	53962	0
|	Se	82	20.058	ug/L	0.407	2	1	5084	2
|	Se	78	20.044	ug/L	0.185	0	11678	23405	0
L	Mo	98	20.080	ug/L	0.066	0	996	165952	0
	Y	89		ug/L			360432	357888	0
	Kr	83		ug/L			150	153	4
[>	In	115		ug/L			393026	387023	0
|	Ag	107	20.004	ug/L	0.133	0	26	272923	0
|	Cd	111	20.045	ug/L	0.107	0	183	66751	0
|	Cd	114	19.998	ug/L	0 131	0	9	153734	0
|	Sb	121	20.073	ug/L	0.090	0	17	210385	0
|	Sb	123	20.095	ug/L	0.253	1	14	159261	1
|	Ba	135	20.022	ug/L	0.177	0	33	50501	0
L	Ba	137	20.007	ug/L	0 307	1	61	86705	1
[>	Tb	159		ug/L			440370	436445	1
|	Tl	205	20.018	ug/L	0.266	1	35	591406	0
|	Pb	208	20.007	ug/L	0.244	1	412	809529	0
|	Bi	209		ug/L			343603	339760	0
|	Th	232	20.027	ug/L	0.161	0	145	927953	0
L	U	238	20.029	ug/L	0 197	0	44	1044317	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 09:21:46
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120312.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas Intens	Intens. RSD
[>	Li	6		ug/L			300527	300766	1
[	Be	9	49.825	ug/L	0 699	1	5	20080	0
	C	13		mg/L			5087	4062	1
	Cl	37		mg/L			2101848	2166914	0
[>	Sc	45		ug/L			261601	255292	1
|	V	51	49.946	ug/L	0 612	1	2510	582532	1
|	V-1	51	49.962	ug/L	0.663	1	1782	593898	1
|	Cr	52	49.849	ug/L	0.726	1	7847	527019	1
|	Cr	53	49.902	ug/L	0 956	1	654	63187	1
|	Mn	55	49.922	ug/L	0.332	0	312	864502	1
[	Co	59	49.925	ug/L	0 073	0	47	708163	1
[>	Ge	72		ug/L			361384	358548	0
|	Ni	60	49.573	ug/L	0 786	1	79	151090	0
|	Ni	62	49.738	ug/L	0 962	1	55	23096	1
|	Cu	63	49.740	ug/L	0.928	1	184	347417	1
|	Cu	65	49.730	ug/L	0.197	0	87	165144	0
|	Zn	66	49.809	ug/L	0.896	1	440	103454	1
|	Zn	67	49.793	ug/L	0.997	2	112	17555	1
|	Zn	68	49.806	ug/L	0.321	0	8394	81934	0
|	As	75	49.903	ug/L	0.352	0	103	107251	0
|	As-1	75	49.908	ug/L	0.620	1	11434	115673	0
|	Se	82	49.504	ug/L	0 101	0	1	11869	0
|	Se	78	49.487	ug/L	1.034	2	11678	38961	0
[	Mo	98	49.913	ug/L	0 625	1	996	404673	0
	Y	89		ug/L			360432	347208	0
	Kr	83		ug/L			150	167	3
[>	In	115		ug/L			393026	378613	0
|	Ag	107	49.917	ug/L	0.635	1	26	660709	1
|	Cd	111	50.004	ug/L	0.208	0	183	162707	0
|	Cd	114	49.916	ug/L	0.244	0	9	372243	0
|	Sb	121	50.157	ug/L	0 533	1	17	522434	1
|	Sb	123	50.196	ug/L	0 359	0	14	396934	0
|	Ba	135	49.940	ug/L	0.335	0	33	122443	0
[	Ba	137	49.986	ug/L	0 382	0	61	211537	0
[>	Tb	159		ug/L			440370	424230	0
|	Tl	205	50.124	ug/L	0.136	0	35	1457484	0
|	Pb	208	50.146	ug/L	0.572	1	412	2000870	0
|	Bi	209		ug/L			343603	336752	0
|	Th	232	50.391	ug/L	0.208	0	145	2361701	0
[	U	238	50.369	ug/L	0.367	0	44	2650521	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 09:27:55
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120312.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas Intens.	Intens. RSD
[>	Li	6		ug/L			300527	293518	1
[	Be	9	100.447	ug/L	0.373	0	5	40106	1
	C	13		mg/L			5087	4439	2
	Cl	37		mg/L			2101848	2236667	0
[>	Sc	45		ug/L			261601	255052	1
|	V	51	100.053	ug/L	1.823	1	2510	1165163	0
|	V-1	51	100.089	ug/L	1.819	1	1782	1190193	0
|	Cr	52	99.927	ug/L	2 206	2	7847	1044998	0
|	Cr	53	100.046	ug/L	2.065	2	654	126089	0
|	Mn	55	99.781	ug/L	2 358	2	312	1713093	2
[	Co	59	99.434	ug/L	2.282	2	47	1382645	1
[>	Ge	72		ug/L			361384	355356	0
|	Ni	60	99.530	ug/L	1.943	1	79	295957	2
|	Ni	62	99.146	ug/L	0 555	0	55	44318	0
|	Cu	63	99.205	ug/L	1 547	1	184	668860	1
|	Cu	65	99.307	ug/L	1.433	1	87	319377	1
|	Zn	66	99.485	ug/L	0.185	0	440	200932	0
|	Zn	67	99.840	ug/L	2 734	2	112	34591	2
|	Zn	68	99.388	ug/L	0.391	0	8394	150919	0
|	As	75	99.891	ug/L	1 007	1	103	211904	0
|	As-1	75	99.970	ug/L	0 453	0	11434	218161	0
|	Se	82	99.760	ug/L	1.459	1	1	23514	1
|	Se	78	100.045	ug/L	0 926	0	11678	66420	1
[	Mo	98	100.021	ug/L	0.615	0	996	803329	0
	Y	89		ug/L			360432	343500	0
	Kr	83		ug/L			150	183	2
[>	In	115		ug/L			393026	377094	1
|	Ag	107	99.502	ug/L	0 520	0	26	1290293	1
|	Cd	111	99.649	ug/L	0.870	0	183	319022	0
|	Cd	114	99.984	ug/L	1 128	1	9	742156	0
|	Sb	121	100.190	ug/L	0.387	0	17	1045998	0
|	Sb	123	100.033	ug/L	1.168	1	14	788623	0
|	Ba	135	99.961	ug/L	0.952	0	33	243742	1
[	Ba	137	99.784	ug/L	2 204	2	61	417459	1
[>	Tb	159		ug/L			440370	420789	0
|	Tl	205	100.357	ug/L	1 632	1	35	2929272	1
|	Pb	208	100.255	ug/L	0 694	0	412	4001431	0
|	Bi	209		ug/L			343603	335548	0
|	Th	232	100.573	ug/L	1.340	1	145	4766160	1
[	U	238	100.605	ug/L	1.054	1	44	5359266	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse Sample
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 09:34:33
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120312.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			300527	300954	0
[	Be	9	-0.002	ug/L	0.004	172	5	4	34
	C	13		mg/L			5087	4929	0
	Cl	37		mg/L			2101848	2254769	1
[>	Sc	45		ug/L			261601	263602	1
|	V	51	-0.014	ug/L	0 002	16	2510	2358	1
|	V-1	51	0.007	ug/L	0.002	32	1782	1876	1
|	Cr	52	-0.060	ug/L	0.012	20	7847	7266	1
|	Cr	53	0.006	ug/L	0.013	216	654	666	1
|	Mn	55	0.006	ug/L	0.002	28	312	414	5
[	Co	59	0.001	ug/L	0 000	17	47	62	5
[>	Ge	72		ug/L			361384	362671	0
|	Ni	60	-0.001	ug/L	0.003	423	79	77	11
|	Ni	62	0.002	ug/L	0 036	1540	55	56	29
|	Cu	63	0.006	ug/L	0 004	59	184	226	11
|	Cu	65	0.004	ug/L	0 001	36	87	100	5
|	Zn	66	0.015	ug/L	0 018	114	440	474	8
|	Zn	67	-0.004	ug/L	0.021	578	112	112	7
|	Zn	68	-0.391	ug/L	0.053	13	8394	7850	0
|	As	75	0.033	ug/L	0.019	58	103	176	23
|	As-1	75	-0.271	ug/L	0.046	16	11434	10903	0
|	Se	82	-0.037	ug/L	0 022	59	1	-6	76
|	Se	78	-1.149	ug/L	0.140	12	11678	11075	0
[	Mo	98	-0.079	ug/L	0.009	11	996	352	20
	Y	89		ug/L			360432	355887	1
	Kr	83		ug/L			150	159	1
[>	In	115		ug/L			393026	387335	0
|	Ag	107	0.018	ug/L	0.007	37	26	263	32
|	Cd	111	0.007	ug/L	0.001	8	183	205	0
|	Cd	114	0.002	ug/L	0.001	51	9	28	34
|	Sb	121	0.069	ug/L	0.019	27	17	756	26
|	Sb	123	0.068	ug/L	0.016	23	14	566	22
|	Ba	135	0.013	ug/L	0.003	20	33	65	9
[	Ba	137	0.008	ug/L	0.001	19	61	94	6
[>	Tb	159		ug/L			440370	429393	1
|	Tl	205	0.012	ug/L	0.003	27	35	395	26
|	Pb	208	0.011	ug/L	0.003	27	412	842	15
|	Bi	209		ug/L			343603	344740	0
|	Th	232	0.085	ug/L	0.017	19	145	4264	20
[	U	238	0.004	ug/L	0.001	33	44	260	29

Quantitative Analysis - Calibration Report

Sample Date/Time: Tuesday, December 04, 2012 09:27:55
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

Analyte	Mass	r Corr Coeff	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	1.0000	0.0014	10	20	50	100	
C	13							
Cl	37							
Sc	45							
V	51	1.0000	0.0456	10	20	50	100	
V-1	51	1.0000	0.0466	10	20	50	100	
Cr	52	1.0000	0.0407	10	20	50	100	
Cr	53	1.0000	0.0049	10	20	50	100	
Mn	55	1.0000	0.0673	10	20	50	100	
Co	59	0.9999	0.0545	10	20	50	100	
Ge	72							
Ni	60	0.9999	0.0084	10	20	50	100	
Ni	62	0.9999	0.0013	10	20	50	100	
Cu	63	0.9999	0.0190	10	20	50	100	
Cu	65	0.9999	0.0090	10	20	50	100	
Zn	66	0.9999	0.0057	10	20	50	100	
Zn	67	1.0000	0.0010	10	20	50	100	
Zn	68	0.9999	0.0040	10	20	50	100	
As	75	1.0000	0.0060	10	20	50	100	
As-1	75	1.0000	0.0058	10	20	50	100	
Se	82	0.9999	0 0007	10	20	50	100	
Se	78	0.9999	0.0015	10	20	50	100	
Mo	98	1.0000	0.0226	10	20	50	100	
Y	89							
Kr	83							
In	115							
Ag	107	1.0000	0.0344	10	20	50	100	
Cd	111	1.0000	0.0085	10	20	50	100	
Cd	114	1.0000	0.0197	10	20	50	100	
Sb	121	1.0000	0.0277	10	20	50	100	
Sb	123	1.0000	0.0209	10	20	50	100	
Ba	135	1.0000	0.0065	10	20	50	100	
Ba	137	1.0000	0.0111	10	20	50	100	
Tb	159							
Tl	205	1.0000	0.0694	10	20	50	100	
Pb	208	1.0000	0.0948	10	20	50	100	
Bi	209							
Th	232	0.9999	0.1126	10	20	50	100	
U	238	0.9999	0.1266	10	20	50	100	

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 10:07:52
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			300527	313820	0
⌊	Be	9	48.463	ug/L	0.519	1	5	20690	0
	C	13		mg/L			5087	7750	3
	Cl	37		mg/L			2101848	2167012	1
⌈>	Sc	45		ug/L			261601	271668	1
|	V	51	49.451	ug/L	0 690	1	2510	614809	0
|	V-1	51	49.281	ug/L	0.764	1	1782	625214	0
|	Cr	52	49.074	ug/L	0.894	1	7847	550865	0
|	Cr	53	48.584	ug/L	1 181	2	654	65575	1
|	Mn	55	49.692	ug/L	1 152	2	312	908893	1
⌊	Co	59	49.787	ug/L	1 286	2	47	737513	2
⌈>	Ge	72		ug/L			361384	374279	1
|	Ni	60	50.502	ug/L	0 784	1	79	158201	1
|	Ni	62	50.957	ug/L	0.855	1	55	24015	0
|	Cu	63	50.591	ug/L	1 255	2	184	359302	1
|	Cu	65	50.023	ug/L	1 340	2	87	169473	2
|	Zn	66	49.355	ug/L	0.496	1	440	105214	0
|	Zn	67	49.357	ug/L	0 757	1	112	18069	0
|	Zn	68	48.577	ug/L	0.570	1	8394	82128	0
|	As	75	50.524	ug/L	0.662	1	103	112933	0
|	As-1	75	49.938	ug/L	0.799	1	11434	120699	1
|	Se	82	79.346	ug/L	1 700	2	1	19695	0
|	Se	78	79.717	ug/L	2.214	2	11678	58188	0
⌊	Mo	98	48.954	ug/L	0.575	1	996	414597	0
	Y	89		ug/L			360432	370689	1
	Kr	83		ug/L			150	168	1
⌈>	In	115		ug/L			393026	396483	1
|	Ag	107	51.053	ug/L	0.398	0	26	696045	0
|	Cd	111	49.146	ug/L	0 654	1	183	165514	0
|	Cd	114	49.052	ug/L	0.560	1	9	382848	1
|	Sb	121	48.428	ug/L	0.428	0	17	531572	0
|	Sb	123	48.444	ug/L	0 186	0	14	401594	1
|	Ba	135	49.543	ug/L	0.203	0	33	127034	0
⌊	Ba	137	49.777	ug/L	0.297	0	61	219029	1
⌈>	Tb	159		ug/L			440370	450247	1
|	Tl	205	48.732	ug/L	0.201	0	35	1522012	1
|	Pb	208	48.810	ug/L	0.141	0	412	2084822	1
|	Bi	209		ug/L			343603	352182	1
|	Th	232	49.476	ug/L	0.593	1	145	2508673	0
⌊	U	238	49.233	ug/L	0.388	0	44	2806094	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 10:14:30
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas Intens.	Intens. RSD
>	Li	6		ug/L			300527	297356	0
	Be	9	0.001	ug/L	0.006	560	5	5	48
	C	13		mg/L			5087	4762	0
	Cl	37		mg/L			2101848	2175861	0
>	Sc	45		ug/L			261601	254644	1
	V	51	-0.005	ug/L	0 003	59	2510	2389	2
	V-1	51	0.001	ug/L	0.002	145	1782	1751	1
	Cr	52	-0.023	ug/L	0.012	52	7847	7404	2
	Cr	53	-0.003	ug/L	0 007	195	654	632	2
	Mn	55	0.003	ug/L	0.002	55	312	357	8
	Co	59	0.000	ug/L	0.001	154	47	52	17
>	Ge	72		ug/L			361384	359123	0
	Ni	60	-0.000	ug/L	0 005	4629	79	78	20
	Ni	62	0.016	ug/L	0.018	114	55	61	12
	Cu	63	0.001	ug/L	0.002	201	184	191	8
	Cu	65	0.003	ug/L	0 001	34	87	98	3
	Zn	66	0.008	ug/L	0.016	199	440	454	7
	Zn	67	0.037	ug/L	0 024	65	112	125	7
	Zn	68	-0.277	ug/L	0 139	50	8394	7940	2
	As	75	0.033	ug/L	0.021	61	103	174	24
	As-1	75	-0.170	ug/L	0.040	23	11434	11007	0
	Se	82	-0.032	ug/L	0.079	247	1	-5	327
	Se	78	-0.748	ug/L	0.165	22	11678	11190	0
	Mo	98	-0.101	ug/L	0 003	3	996	168	16
	Y	89		ug/L			360432	349310	1
	Kr	83		ug/L			150	161	4
>	In	115		ug/L			393026	379410	0
	Ag	107	0.011	ug/L	0.002	19	26	165	17
	Cd	111	0.001	ug/L	0 001	252	183	178	2
	Cd	114	0.002	ug/L	0.000	16	9	25	10
	Sb	121	0.011	ug/L	0.003	22	17	134	20
	Sb	123	0.011	ug/L	0.002	18	14	99	15
	Ba	135	0.009	ug/L	0.003	36	33	55	14
	Ba	137	0.006	ug/L	0.002	36	61	85	10
>	Tb	159		ug/L			440370	419294	1
	Tl	205	0.005	ug/L	0.001	22	35	176	19
	Pb	208	0.007	ug/L	0.002	26	412	669	12
	Bi	209		ug/L			343603	336296	0
	Th	232	0.050	ug/L	0.008	16	145	2486	16
	U	238	0.002	ug/L	0.000	13	44	166	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 10:20:19
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc RSD	Blank Intens.	Meas. Intens	Intens. RSD
⌈>	**Li**	**6**		ug/L			300527	305028	0
⌊	**Be**	**9**	**48.529**	ug/L	0 569	1	5	20139	1
	C	**13**		mg/L			5087	2954	3
	Cl	**37**		mg/L			2101848	2194788	0
⌈>	**Sc**	**45**		ug/L			261601	262028	1
|	**V**	**51**	**47.919**	ug/L	1 292	2	2510	574639	1
|	**V-1**	**51**	**47.851**	ug/L	1 199	2	1782	585536	1
|	**Cr**	**52**	**48.738**	ug/L	1 076	2	7847	527745	1
|	**Cr**	**53**	**48.480**	ug/L	0.640	1	654	63120	0
|	**Mn**	**55**	**49.363**	ug/L	0 765	1	312	870935	1
⌊	**Co**	**59**	**48.484**	ug/L	0 704	1	47	692708	0
⌈>	**Ge**	**72**		ug/L			361384	362075	0
|	**Ni**	**60**	**48.891**	ug/L	0 643	1	79	148157	0
|	**Ni**	**62**	**49.759**	ug/L	0 242	0	55	22690	0
|	**Cu**	**63**	**49.538**	ug/L	0.214	0	184	340407	0
|	**Cu**	**65**	**49.612**	ug/L	0.311	0	87	162623	1
|	**Zn**	**66**	**48.880**	ug/L	0.288	0	440	100818	1
|	**Zn**	**67**	**49.566**	ug/L	0 811	1	112	17554	0
|	**Zn**	**68**	**49.190**	ug/L	0.403	0	8394	80356	1
|	**As**	**75**	**48.658**	ug/L	0 554	1	103	105220	0
|	**As-1**	**75**	**48.546**	ug/L	0.604	1	11434	113831	0
|	**Se**	**82**	**49.846**	ug/L	0 882	1	1	11971	0
|	**Se**	**78**	**49.537**	ug/L	1.001	2	11678	39412	0
⌊	**Mo**	**98**	**48.655**	ug/L	0.351	0	996	398687	1
	Y	**89**		ug/L			360432	356457	0
	Kr	**83**		ug/L			150	168	7
⌈>	**In**	**115**		ug/L			393026	380269	0
|	**Ag**	**107**	**49.847**	ug/L	0.154	0	26	651854	0
|	**Cd**	**111**	**49.876**	ug/L	0.331	0	183	161115	0
|	**Cd**	**114**	**49.144**	ug/L	0 275	0	9	367895	0
|	**Sb**	**121**	**48.503**	ug/L	0.360	0	17	510667	0
|	**Sb**	**123**	**48.934**	ug/L	0.181	0	14	389071	0
|	**Ba**	**135**	**49.471**	ug/L	0.291	0	33	121665	0
⌊	**Ba**	**137**	**49.320**	ug/L	0 489	0	61	208139	1
⌈>	**Tb**	**159**		ug/L			440370	433538	0
|	**Tl**	**205**	**48.070**	ug/L	0.142	0	35	1445668	0
|	**Pb**	**208**	**47.767**	ug/L	0.181	0	412	1964540	0
|	**Bi**	**209**		ug/L			343603	341482	0
|	**Th**	**232**	**48.596**	ug/L	0.403	0	145	2372926	1
⌊	**U**	**238**	**47.930**	ug/L	0 083	0	44	2630639	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 10:26:57
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			300527	301113	1
[	Be	9	0.001	ug/L	0 007	687	5	5	53
	C	13		mg/L			5087	4585	0
	Cl	37		mg/L			2101848	2209769	0
[>	Sc	45		ug/L			261601	256695	0
[	V	51	-0.006	ug/L	0.013	218	2510	2391	6
[	V-1	51	-0.019	ug/L	0 008	42	1782	1520	5
[	Cr	52	-0.022	ug/L	0.031	143	7847	7474	4
[	Cr	53	-0.060	ug/L	0.048	80	654	565	10
[	Mn	55	0.005	ug/L	0.001	27	312	390	6
[	Co	59	0.001	ug/L	0 000	39	47	57	7
[>	Ge	72		ug/L			361384	361781	0
[	Ni	60	0.003	ug/L	0.001	35	79	89	3
[	Ni	62	-0.017	ug/L	0.028	162	55	47	27
[	Cu	63	0.005	ug/L	0.002	49	184	216	7
[	Cu	65	0.006	ug/L	0 004	73	87	107	12
[	Zn	66	0.010	ug/L	0.008	75	440	462	3
[	Zn	67	0.001	ug/L	0.016	1785	112	113	4
[	Zn	68	-0.291	ug/L	0 035	12	8394	7978	0
[	As	75	0.027	ug/L	0.011	41	103	161	15
[	As-1	75	-0.141	ug/L	0.018	13	11434	11151	0
[	Se	82	-0.006	ug/L	0.015	234	1	0	900
[	Se	78	-0.605	ug/L	0.078	12	11678	11352	0
[	Mo	98	-0.102	ug/L	0 002	2	996	160	11
	Y	89		ug/L			360432	360914	0
	Kr	83		ug/L			150	157	4
[>	In	115		ug/L			393026	386133	0
[	Ag	107	0.013	ug/L	0 004	30	26	196	26
[	Cd	111	0.007	ug/L	0 001	16	183	201	2
[	Cd	114	0.002	ug/L	0.002	80	9	25	49
[	Sb	121	0.040	ug/L	0.009	22	17	440	21
[	Sb	123	0.039	ug/L	0.010	27	14	326	25
[	Ba	135	0.010	ug/L	0.002	17	33	57	7
[	Ba	137	0.005	ug/L	0 001	26	61	81	6
[>	Tb	159		ug/L			440370	428546	0
[	Tl	205	0.005	ug/L	0 001	26	35	180	20
[	Pb	208	0.008	ug/L	0.001	17	412	735	7
[	Bi	209		ug/L			343603	343704	0
[	Th	232	0.049	ug/L	0.008	16	145	2493	14
[	U	238	0.003	ug/L	0.000	12	44	200	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 10:32:46
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			300527	288694	0
[	Be	9	0.185	ug/L	0.003	1	5	77	1
	C	13		mg/L			5087	4354	1
	Cl	37		mg/L			2101848	2200713	0
[>	Sc	45		ug/L			261601	247934	2
|	V	51	0.201	ug/L	0 025	12	2510	4650	4
|	V-1	51	0.196	ug/L	0 005	2	1782	3951	1
|	Cr	52	0.521	ug/L	0.012	2	7847	12699	1
|	Cr	53	0.484	ug/L	0.051	10	654	1211	7
|	Mn	55	0.523	ug/L	0 017	3	312	9016	0
[	Co	59	0.214	ug/L	0 015	7	47	2933	4
[>	Ge	72		ug/L			361384	349103	1
|	Ni	60	0.515	ug/L	0.011	2	79	1579	1
|	Ni	62	0.549	ug/L	0 041	7	55	293	5
|	Cu	63	0.544	ug/L	0 016	3	184	3777	2
|	Cu	65	0.559	ug/L	0.013	2	87	1849	0
|	Zn	66	4.236	ug/L	0 040	0	440	8812	1
|	Zn	67	3.806	ug/L	0.118	3	112	1400	2
|	Zn	68	4.045	ug/L	0.110	2	8394	13812	0
|	As	75	0.230	ug/L	0 018	7	103	580	7
|	As-1	75	0.238	ug/L	0.088	36	11434	11529	0
|	Se	82	0.520	ug/L	0.080	15	1	122	15
|	Se	78	0.623	ug/L	0 423	67	11678	11615	0
[	Mo	98	0.092	ug/L	0 007	7	996	1683	1
	Y	89		ug/L			360432	346564	0
	Kr	83		ug/L			150	155	5
[>	In	115		ug/L			393026	368091	1
|	Ag	107	0.217	ug/L	0.007	3	26	2770	2
|	Cd	111	0.113	ug/L	0 002	2	183	524	1
|	Cd	114	0.112	ug/L	0 002	1	9	821	0
|	Sb	121	0.212	ug/L	0 002	1	17	2177	1
|	Sb	123	0.223	ug/L	0 005	2	14	1729	2
|	Ba	135	0.502	ug/L	0.004	0	33	1227	0
[	Ba	137	0.512	ug/L	0.020	3	61	2149	3
[>	Tb	159		ug/L			440370	416947	0
|	Tl	205	0.211	ug/L	0 002	1	35	6123	0
|	Pb	208	0.106	ug/L	0.002	2	412	4600	1
|	Bi	209		ug/L			343603	330967	0
|	Th	232	0.223	ug/L	0.007	3	145	10607	2
[	U	238	0.195	ug/L	0.002	1	44	10360	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 10:38:33
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens.	Meas Intens.	Intens. RSD
[>	Li	6		ug/L			300527	292538	1
[	Be	9	0.007	ug/L	0.011	167	5	7	57
	C	13		mg/L			5087	14906	0
	Cl	37		mg/L			2101848	3761746	0
[>	Sc	45		ug/L			261601	257137	1
|	V	51	0.002	ug/L	0 016	679	2510	2496	9
|	V-1	51	0.639	ug/L	0 029	4	1782	9399	2
|	Cr	52	0.473	ug/L	0.005	1	7847	12663	1
|	Cr	53	2.370	ug/L	0.138	5	654	3638	3
|	Mn	55	0.073	ug/L	0 005	7	312	1573	4
[	Co	59	0.025	ug/L	0 001	4	47	395	6
[>	Ge	72		ug/L			361384	359970	1
|	Ni	60	0.530	ug/L	0.014	2	79	1676	3
|	Ni	62	3.723	ug/L	0.017	0	55	1738	0
|	Cu	63	0.489	ug/L	0 010	1	184	3524	2
|	Cu	65	0.588	ug/L	0.016	2	87	2001	3
|	Zn	66	1.029	ug/L	0.047	4	440	2540	4
|	Zn	67	1.725	ug/L	0 033	1	112	715	0
|	Zn	68	-0.089	ug/L	0 106	119	8394	8233	2
|	As	75	0.100	ug/L	0 007	7	103	317	5
|	As-1	75	-0.192	ug/L	0.028	14	11434	10987	1
|	Se	82	-0.100	ug/L	0.074	73	1	-21	79
|	Se	78	-0.988	ug/L	0.185	18	11678	11083	1
[	Mo	98	390.532	ug/L	4.707	1	996	3174348	1
	Y	89		ug/L			360432	344445	1
	Kr	83		ug/L			150	199	4
[>	In	115		ug/L			393026	371176	0
|	Ag	107	0.028	ug/L	0.002	7	26	382	7
|	Cd	111	0.056	ug/L	0.022	39	183	350	20
|	Cd	114	0.742	ug/L	0.028	3	9	5429	4
|	Sb	121	0.070	ug/L	0 003	4	17	739	5
|	Sb	123	0.071	ug/L	0.004	5	14	561	6
|	Ba	135	0.036	ug/L	0.006	17	33	118	13
[	Ba	137	0.036	ug/L	0.001	4	61	205	3
[>	Tb	159		ug/L			440370	418850	2
|	Tl	205	0.032	ug/L	0.000	1	35	966	3
|	Pb	208	0.029	ug/L	0 001	3	412	1556	2
|	Bi	209		ug/L			343603	326473	1
|	Th	232	0.111	ug/L	0.018	16	145	5379	17
[	U	238	0.001	ug/L	0.000	4	44	120	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 10:44:51
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas. Intens	Intens. RSD
>	Li	6		ug/L			300527	287435	0
	Be	9	-0.003	ug/L	0.003	120	5	3	33
	C	13		mg/L			5087	14780	1
	Cl	37		mg/L			2101848	3674104	1
>	Sc	45		ug/L			261601	254284	0
	V	51	-0.548	ug/L	0.155	28	2510	-3907	45
	V-1	51	0.695	ug/L	0.005	0	1782	9963	0
	Cr	52	20.332	ug/L	0.057	0	7847	218120	0
	Cr	53	22.749	ug/L	0 440	1	654	29083	1
	Mn	55	20.097	ug/L	0.221	1	312	344298	1
	Co	59	20.207	ug/L	0 251	1	47	280236	1
>	Ge	72		ug/L			361384	356225	0
	Ni	60	20.691	ug/L	0 315	1	79	61741	2
	Ni	62	24.279	ug/L	0.196	0	55	10920	0
	Cu	63	20.006	ug/L	0 300	1	184	135371	2
	Cu	65	20.346	ug/L	0.470	2	87	65667	2
	Zn	66	20.188	ug/L	0.182	0	440	41219	0
	Zn	67	18.684	ug/L	0 216	1	112	6580	0
	Zn	68	18.764	ug/L	0 256	1	8394	35274	1
	As	75	19.271	ug/L	0 102	0	103	41063	0
	As-1	75	19.609	ug/L	0.086	0	11434	51956	0
	Se	82	-0.102	ug/L	0.025	24	1	-22	26
	Se	78	-0.386	ug/L	0 095	24	11678	11299	1
	Mo	98	395.576	ug/L	2.249	0	996	3181890	0
	Y	89		ug/L			360432	345470	1
	Kr	83		ug/L			150	197	1
>	In	115		ug/L			393026	370761	0
	Ag	107	19.816	ug/L	0 224	1	26	252683	1
	Cd	111	19.877	ug/L	0.224	1	183	62710	1
	Cd	114	20.235	ug/L	0.211	1	9	147699	1
	Sb	121	0.066	ug/L	0 003	4	17	698	4
	Sb	123	0.069	ug/L	0.004	5	14	551	5
	Ba	135	0.038	ug/L	0.005	13	33	122	9
	Ba	137	0.028	ug/L	0.004	13	61	172	8
>	Tb	159		ug/L			440370	414711	1
	Tl	205	0.032	ug/L	0 001	3	35	959	2
	Pb	208	0.027	ug/L	0.000	1	412	1444	1
	Bi	209		ug/L			343603	320350	0
	Th	232	0.054	ug/L	0.002	3	145	2678	4
	U	238	0.001	ug/L	0.000	5	44	102	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 10:51:08
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			300527	285989	2
	Be	9	196.222	ug/L	3.703	1	5	76313	0
	C	13		mg/L			5087	4494	2
	Cl	37		mg/L			2101848	2186871	1
>	Sc	45		ug/L			261601	250409	1
	V	51	200.601	ug/L	2.956	1	2510	2291913	2
	V-1	51	200.200	ug/L	2 614	1	1782	2336224	2
	Cr	52	199.832	ug/L	2.232	1	7847	2045020	2
	Cr	53	198.669	ug/L	1.467	0	654	245257	0
	Mn	55	197.893	ug/L	0.833	0	312	3335825	1
	Co	59	200.487	ug/L	1 065	0	47	2737691	2
>	Ge	72		ug/L			361384	356938	1
	Ni	60	189.161	ug/L	2.629	1	79	564878	1
	Ni	62	193.662	ug/L	4.532	2	55	86883	0
	Cu	63	190.466	ug/L	3.186	1	184	1289548	0
	Cu	65	188.736	ug/L	0.956	0	87	609618	1
	Zn	66	193.264	ug/L	0.743	0	440	391655	1
	Zn	67	189.983	ug/L	2.090	1	112	66013	0
	Zn	68	189.671	ug/L	1 131	0	8394	281770	1
	As	75	194.238	ug/L	2 412	1	103	413775	1
	As-1	75	194.856	ug/L	2.832	1	11434	416390	1
	Se	82	194.449	ug/L	1.708	0	1	46038	1
	Se	78	196.724	ug/L	3 609	1	11678	120044	2
	Mo	98	196.517	ug/L	2 171	1	996	1584565	2
	Y	89		ug/L			360432	343782	1
	Kr	83		ug/L			150	202	1
>	In	115		ug/L			393026	368989	1
	Ag	107	202.526	ug/L	3.186	1	26	2569627	0
	Cd	111	200.079	ug/L	1.468	0	183	626620	0
	Cd	114	196.575	ug/L	1.551	0	9	1427846	0
	Sb	121	206.681	ug/L	3.154	1	17	2111313	1
	Sb	123	201.611	ug/L	1.789	0	14	1555317	0
	Ba	135	200.138	ug/L	1.172	0	33	477497	0
	Ba	137	200.376	ug/L	1.484	0	61	820324	0
>	Tb	159		ug/L			440370	417203	1
	Tl	205	199.150	ug/L	2.359	1	35	5762978	0
	Pb	208	196.659	ug/L	1 656	0	412	7781486	0
	Bi	209		ug/L			343603	314722	0
	Th	232	200.890	ug/L	2 348	1	145	9438187	0
	U	238	199.090	ug/L	0.300	0	44	10515388	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR300
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 10:57:45
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens	Intens. RSD
[>	Li	6		ug/L			300527	276144	1
[	Be	9	296.909	ug/L	3 126	1	5	111515	1
	C	13		mg/L			5087	4855	2
	Cl	37		mg/L			2101848	2280602	1
[>	Sc	45		ug/L			261601	247262	2
|	V	51	304.080	ug/L	4.711	1	2510	3428372	1
|	V-1	51	300.295	ug/L	6.023	2	1782	3458341	1
|	Cr	52	303.144	ug/L	3.370	1	7847	3058812	2
|	Cr	53	291.741	ug/L	7.492	2	654	355229	1
|	Mn	55	303.277	ug/L	1.682	0	312	5047591	2
[	Co	59	297.257	ug/L	4 717	1	47	4008085	3
[>	Ge	72		ug/L			361384	354795	0
|	Ni	60	279.216	ug/L	5 401	1	79	828781	1
|	Ni	62	284.191	ug/L	2 084	0	55	126733	0
|	Cu	63	278.663	ug/L	3.527	1	184	1875521	0
|	Cu	65	280.745	ug/L	3 387	1	87	901323	1
|	Zn	66	280.284	ug/L	3.464	1	440	564400	0
|	Zn	67	275.350	ug/L	0.470	0	112	95060	0
|	Zn	68	281.785	ug/L	1.156	0	8394	412088	0
|	As	75	289.453	ug/L	1.496	0	103	612878	0
|	As-1	75	291.325	ug/L	1 825	0	11434	613262	0
|	Se	82	282.543	ug/L	2.593	0	1	66490	0
|	Se	78	288.866	ug/L	3.235	1	11678	169832	0
[	Mo	98	305.063	ug/L	2.041	0	996	2444208	0
	Y	89		ug/L			360432	335070	0
	Kr	83		ug/L			150	229	2
[>	In	115		ug/L			393026	366663	1
|	Ag	107	298.424	ug/L	4.803	1	26	3762540	1
|	Cd	111	292.369	ug/L	1 901	0	183	909815	1
|	Cd	114	299.678	ug/L	1.654	0	9	2163157	1
|	Sb	121	310.771	ug/L	3.059	0	17	3154782	1
|	Sb	123	311.157	ug/L	1 530	0	14	2385470	1
|	Ba	135	298.978	ug/L	3 151	1	33	708773	0
[	Ba	137	297.443	ug/L	3 046	1	61	1209982	0
[>	Tb	159		ug/L			440370	406655	0
|	Tl	205	300.929	ug/L	0.737	0	35	8488875	0
|	Pb	208	302.579	ug/L	2.247	0	412	11670370	0
|	Bi	209		ug/L			343603	290373	0
|	Th	232	304.776	ug/L	2 919	0	145	13958030	0
[	U	238	303.209	ug/L	2.126	0	44	15609249	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 11:04:23
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			300527	293509	1
[	Be	9	49.671	ug/L	0 560	1	5	19835	2
	C	13		mg/L			5087	3013	2
	Cl	37		mg/L			2101848	2319055	0
[>	Sc	45		ug/L			261601	253237	0
[	V	51	49.702	ug/L	0 942	1	2510	576010	1
[	V-1	51	49.529	ug/L	1.048	2	1782	585740	1
[	Cr	52	49.739	ug/L	0.249	0	7847	520399	0
[	Cr	53	49.210	ug/L	0.435	0	654	61916	0
[	Mn	55	49.723	ug/L	0 729	1	312	847879	1
[	Co	59	49.554	ug/L	0.252	0	47	684327	0
[>	Ge	72		ug/L			361384	366198	0
[	Ni	60	47.187	ug/L	0.608	1	79	144630	0
[	Ni	62	49.022	ug/L	0.662	1	55	22608	0
[	Cu	63	47.937	ug/L	0.768	1	184	333148	1
[	Cu	65	49.360	ug/L	0.412	0	87	163635	0
[	Zn	66	49.408	ug/L	0.657	1	440	103061	1
[	Zn	67	48.537	ug/L	0 925	1	112	17388	1
[	Zn	68	48.405	ug/L	0.394	0	8394	80109	1
[	As	75	48.888	ug/L	0.108	0	103	106927	0
[	As-1	75	48.811	ug/L	0.162	0	11434	115698	0
[	Se	82	49.094	ug/L	0.251	0	1	11926	0
[	Se	78	48.849	ug/L	0.662	1	11678	39474	0
[	Mo	98	48.014	ug/L	0 299	0	996	397923	1
	Y	89		ug/L			360432	350996	1
	Kr	83		ug/L			150	175	3
[>	In	115		ug/L			393026	381096	0
[	Ag	107	49.683	ug/L	0.233	0	26	651127	0
[	Cd	111	49.653	ug/L	0.702	1	183	160748	1
[	Cd	114	49.304	ug/L	0.390	0	9	369902	1
[	Sb	121	49.629	ug/L	0.203	0	17	523653	0
[	Sb	123	49.243	ug/L	0 277	0	14	392374	0
[	Ba	135	49.466	ug/L	0.960	1	33	121913	1
[	Ba	137	49.217	ug/L	0.774	1	61	208148	1
[>	Tb	159		ug/L			440370	424446	1
[	Tl	205	49.121	ug/L	0 713	1	35	1446154	0
[	Pb	208	48.891	ug/L	0 440	0	412	1968484	0
[	Bi	209		ug/L			343603	344419	0
[	Th	232	51.229	ug/L	0.407	0	145	2448863	0
[	U	238	50.307	ug/L	0.447	0	44	2703045	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 11:11:01
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens. RSD
[>	Li	6		ug/L			300527	285774	0
[	Be	9	0.007	ug/L	0.006	80	5	7	28
	C	13		mg/L			5087	4516	2
	Cl	37		mg/L			2101848	2345101	0
[>	Sc	45		ug/L			261601	255656	0
|	V	51	-0.010	ug/L	0.012	123	2510	2335	6
|	V-1	51	0.074	ug/L	0.002	3	1782	2618	0
|	Cr	52	-0.043	ug/L	0.010	22	7847	7222	1
|	Cr	53	0.213	ug/L	0.045	21	654	906	6
|	Mn	55	0.011	ug/L	0.002	20	312	498	7
[	Co	59	0.004	ug/L	0.001	13	47	100	6
[>	Ge	72		ug/L			361384	361211	0
|	Ni	60	0.003	ug/L	0.002	69	79	89	7
|	Ni	62	0.047	ug/L	0 033	70	55	76	19
|	Cu	63	0.013	ug/L	0 002	12	184	276	4
|	Cu	65	0.009	ug/L	0.002	26	87	117	6
|	Zn	66	0.024	ug/L	0.009	38	440	490	3
|	Zn	67	0.052	ug/L	0.022	42	112	131	5
|	Zn	68	-0.211	ug/L	0.037	17	8394	8081	0
|	As	75	0.038	ug/L	0.011	30	103	184	12
|	As-1	75	-0.129	ug/L	0.040	30	11434	11157	0
|	Se	82	0.001	ug/L	0.064	8985	1	2	741
|	Se	78	-0.596	ug/L	0.152	25	11678	11340	0
[	Mo	98	-0.089	ug/L	0.002	2	996	273	5
	Y	89		ug/L			360432	355666	2
	Kr	83		ug/L			150	157	4
[>	In	115		ug/L			393026	384214	0
|	Ag	107	0.025	ug/L	0.005	20	26	353	20
|	Cd	111	0.008	ug/L	0 006	78	183	204	9
|	Cd	114	0.006	ug/L	0.002	31	9	52	25
|	Sb	121	0.056	ug/L	0 009	15	17	615	16
|	Sb	123	0.059	ug/L	0.011	18	14	484	18
|	Ba	135	0.011	ug/L	0.003	30	33	59	12
[	Ba	137	0.009	ug/L	0 004	42	61	98	17
[>	Tb	159		ug/L			440370	418825	1
|	Tl	205	0.013	ug/L	0.001	8	35	400	8
|	Pb	208	0.013	ug/L	0.003	23	412	902	13
|	Bi	209		ug/L			343603	339383	0
|	Th	232	0.080	ug/L	0.012	14	145	3892	14
[	U	238	0.006	ug/L	0.001	10	44	374	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT41 MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, December 04, 2012 11:19:43
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas Intens	Intens. RSD
>	Li	6			ug/L			300527	294188	0
	Be	9	0.021		ug/L	0 004	18	5	13	10
	C	13			mg/L			5087	4993	3
	Cl	37			mg/L			2101848	2319950	0
>	Sc	45			ug/L			261601	263234	1
	V	51	-0.001		ug/L	0 026	4756	2510	2519	12
	V-1	51	0.084		ug/L	0 004	4	1782	2828	2
	Cr	52	0.965		ug/L	0.136	14	7847	18245	9
	Cr	53	1.159		ug/L	0 159	13	654	2160	10
	Mn	55	0.190		ug/L	0.005	2	312	3686	2
	Co	59	0.007		ug/L	0 001	16	47	147	10
>	Ge	72			ug/L			361384	369180	0
	Ni	60	0.063		ug/L	0 005	8	79	274	6
	Ni	62	0.057		ug/L	0 015	26	55	82	9
	Cu	63	0.181	U	ug/L	0.018	10	184	1454	8
	Cu	65	0.179		ug/L	0.013	7	87	686	6
	Zn	66	1.546	U	ug/L	0 149	9	440	3686	8
	Zn	67	1.373		ug/L	0 045	3	112	607	2
	Zn	68	1.219		ug/L	0.249	20	8394	10392	3
	As	75	0.049		ug/L	0 007	13	103	214	6
	As-1	75	-0.134		ug/L	0 059	43	11434	11392	0
	Se	82	-0.004		ug/L	0.019	499	1	1	431
	Se	78	-0.649		ug/L	0.211	32	11678	11559	0
	Mo	98	-0.067		ug/L	0.009	13	996	459	16
	Y	89			ug/L			360432	366623	1
	Kr	83			ug/L			150	164	3
>	In	115			ug/L			393026	391431	1
	Ag	107	0.018		ug/L	0 003	16	26	265	16
	Cd	111	0.006	U	ug/L	0.002	39	183	202	4
	Cd	114	0.008		ug/L	0.001	12	9	70	11
	Sb	121	0.031		ug/L	0 003	10	17	351	11
	Sb	123	0.032		ug/L	0.003	10	14	276	11
	Ba	135	0.127		ug/L	0.014	11	33	355	11
	Ba	137	0.134		ug/L	0.012	9	61	643	9
>	Tb	159			ug/L			440370	433741	0
	Tl	205	0.012		ug/L	0.003	20	35	402	18
	Pb	208	0.030	U	ug/L	0 002	7	412	1648	5
	Bi	209			ug/L			343603	345897	0
	Th	232	0.092		ug/L	0.011	12	145	4614	11
	U	238	0.007		ug/L	0 001	11	44	411	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS42R MB REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, December 04, 2012 11:26:00
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			300527	296397	2
[	Be	9	0.001	ug/L	0 008	574	5	5	53
	C	13		mg/L			5087	4941	0
	Cl	37		mg/L			2101848	2321270	0
[>	Sc	45		ug/L			261601	263903	2
[	V	51	-0.002	ug/L	0 010	513	2510	2508	3
[	V-1	51	0.044	ug/L	0 012	26	1782	2339	3
[	Cr	52	-0.002	ug/L	0 012	575	7847	7896	3
[	Cr	53	0.138	ug/L	0.012	8	654	838	2
[	Mn	55	0.058	ug/L	0.001	1	312	1346	1
[	Co	59	0.004	ug/L	0.001	12	47	107	8
[>	Ge	72		ug/L			361384	375963	1
[	Ni	60	0.016	ug/L	0.007	47	79	132	19
[	Ni	62	0.009	ug/L	0.007	83	55	61	5
[	Cu	63	0.055	ug/L	0 006	10	184	587	8
[	Cu	65	0.055	ug/L	0.001	2	87	279	3
[	Zn	66	0.217	ug/L	0 022	10	440	921	6
[	Zn	67	0.261	ug/L	0.073	27	112	212	14
[	Zn	68	-0.103	ug/L	0.073	70	8394	8575	0
[	As	75	0.026	ug/L	0.018	70	103	165	23
[	As-1	75	-0.168	ug/L	0 105	62	11434	11527	2
[	Se	82	0.015	ug/L	0.065	442	1	5	295
[	Se	78	-0.694	ug/L	0.415	59	11678	11746	2
[	Mo	98	-0.097	ug/L	0.002	2	996	209	8
	Y	89		ug/L			360432	371391	3
	Kr	83		ug/L			150	161	6
[>	In	115		ug/L			393026	401239	1
[	Ag	107	0.014	ug/L	0 001	7	26	221	7
[	Cd	111	0.005	ug/L	0 003	62	183	202	5
[	Cd	114	0.004	ug/L	0 001	16	9	43	11
[	Sb	121	0.016	ug/L	0.002	12	17	190	13
[	Sb	123	0.014	ug/L	0.001	5	14	131	4
[	Ba	135	0.190	ug/L	0.007	3	33	526	2
[	Ba	137	0.181	ug/L	0 006	3	61	868	2
[>	Tb	159		ug/L			440370	442024	1
[	Tl	205	0.007	ug/L	0.000	1	35	257	0
[	Pb	208	0.012	ug/L	0.001	6	412	936	2
[	Bi	209		ug/L			343603	352444	1
[	Th	232	0.038	ug/L	0.002	6	145	2057	4
[	U	238	0.003	ug/L	0 000	10	44	235	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 11:32:17
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas Intens	Intens. RSD
[>	Li	6		ug/L			300527	281743	2
[	Be	9	0.010	ug/L	0 014	133	5	8	62
	C	13		mg/L			5087	2768	0
	Cl	37		mg/L			2101848	2286233	0
[>	Sc	45		ug/L			261601	248749	2
[	V	51	0.001	ug/L	0.016	3164	2510	2395	10
[	V-1	51	0.034	ug/L	0 006	18	1782	2087	2
[	Cr	52	-0.016	ug/L	0 014	86	7847	7299	3
[	Cr	53	0.086	ug/L	0 053	61	654	726	6
[	Mn	55	0.001	ug/L	0.001	94	312	310	6
[	Co	59	0.003	ug/L	0.001	26	47	91	14
[>	Ge	72		ug/L			361384	357288	1
[	Ni	60	-0.016	ug/L	0.002	15	79	31	22
[	Ni	62	-0.015	ug/L	0 035	233	55	47	32
[	Cu	63	0.001	ug/L	0 001	107	184	185	0
[	Cu	65	-0.002	ug/L	0.004	188	87	80	15
[	Zn	66	-0.119	ug/L	0 010	8	440	194	11
[	Zn	67	-0.062	ug/L	0.041	66	112	90	17
[	Zn	68	0.009	ug/L	0.078	850	8394	8312	2
[	As	75	0.013	ug/L	0 017	131	103	130	26
[	As-1	75	0.263	ug/L	0 099	37	11434	11852	2
[	Se	82	-0.050	ug/L	0 044	88	1	-9	106
[	Se	78	0.973	ug/L	0.381	39	11678	12083	2
[	Mo	98	-0.109	ug/L	0.001	1	996	103	10
	Y	89		ug/L			360432	351549	2
	Kr	83		ug/L			150	168	2
[>	In	115		ug/L			393026	380572	1
[	Ag	107	0.007	ug/L	0.002	24	26	113	20
[	Cd	111	0.005	ug/L	0 004	94	183	192	5
[	Cd	114	0.002	ug/L	0 001	45	9	23	25
[	Sb	121	0.008	ug/L	0.001	12	17	103	8
[	Sb	123	0.007	ug/L	0.002	22	14	71	16
[	Ba	135	-0.005	ug/L	0.001	28	33	20	18
[	Ba	137	-0.005	ug/L	0.002	31	61	39	16
[>	Tb	159		ug/L			440370	418403	1
[	Tl	205	0.003	ug/L	0.000	13	35	115	10
[	Pb	208	-0.001	ug/L	0.000	30	412	362	2
[	Bi	209		ug/L			343603	331922	1
[	Th	232	0.009	ug/L	0.000	3	145	586	3
[	U	238	0.002	ug/L	0 001	27	44	166	20

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ERA P197
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, December 04, 2012 11:38:34
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas Intens	Intens. RSD
[>	Li	6		ug/L			300527	284301	1
[	Be	9	6.292	ug/L	0.359	5	5	2436	4
	C	13		mg/L			5087	4239	0
	Cl	37		mg/L			2101848	2307800	0
[>	Sc	45		ug/L			261601	253494	1
[	V	51	52.011	ug/L	0.532	1	2510	603349	2
[	V-1	51	51.944	ug/L	0.637	1	1782	614920	2
[	Cr	52	55.977	ug/L	0.807	1	7847	585236	0
[	Cr	53	55.518	ug/L	1 153	2	654	69832	1
[	Mn	55	46.654	ug/L	0 670	1	312	796362	1
[	Co	59	89.754	ug/L	2.354	2	47	1240517	2
[>	Ge	72		ug/L			361384	362672	0
[	Ni	60	70.311	ug/L	1.056	1	79	213388	1
[	Ni	62	69.766	ug/L	0 688	0	55	31843	0
[	Cu	63	31.053	ug/L	0.347	1	184	213810	1
[	Cu	65	30.954	ug/L	0 183	0	87	101663	0
[	Zn	66	48.022	ug/L	0.568	1	440	99212	0
[	Zn	67	47.670	ug/L	0 997	2	112	16917	2
[	Zn	68	48.715	ug/L	0 487	0	8394	79790	1
[	As	75	21.914	ug/L	0.461	2	103	47526	1
[	As-1	75	21.568	ug/L	0.631	2	11434	57033	2
[	Se	82	31.994	ug/L	0.638	1	1	7697	1
[	Se	78	31.603	ug/L	1.458	4	11678	29427	2
[	Mo	98	53.019	ug/L	0.639	1	996	435033	0
	Y	89		ug/L			360432	354696	0
	Kr	83		ug/L			150	158	3
[>	In	115		ug/L			393026	383519	0
[	Ag	107	40.721	ug/L	0.210	0	26	537079	1
[	Cd	111	14.628	ug/L	0 084	0	183	47783	0
[	Cd	114	14.729	ug/L	0.143	0	9	111205	0
[	Sb	121	30.178	ug/L	0 377	1	17	320444	1
[	Sb	123	30.059	ug/L	0.219	0	14	241047	1
[	Ba	135	45.210	ug/L	0.908	2	33	112144	2
[	Ba	137	45.312	ug/L	0 722	1	61	192856	1
[>	Tb	159		ug/L			440370	423775	0
[	Tl	205	18.306	ug/L	0.239	1	35	538143	0
[	Pb	208	212.061	ug/L	2.615	1	412	8523377	0
[	Bi	209		ug/L			343603	344772	0
[	Th	232	0.013	ug/L	0.001	4	145	750	3
[	U	238	0.002	ug/L	0.000	20	44	163	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 ADUP REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, December 04, 2012 11:44:53
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas Intens.	Intens. RSD
>	Li	6		ug/L			300527	290138	1
	Be	9	U 0.013	ug/L	0.003	22	5	10	12
	C	13		mg/L			5087	5257	3
	Cl	37		mg/L			2101848	2295808	0
>	Sc	45		ug/L			261601	262061	0
	V	51	0.457	ug/L	0 007	1	2510	7966	0
	V-1	51	0.482	ug/L	0.006	1	1782	7671	0
	Cr	52	0.262	ug/L	0.009	3	7847	10658	0
	Cr	53	0.353	ug/L	0 020	5	654	1110	1
	Mn	55	45.305	ug/L	0 386	0	312	799468	0
	Co	59	0.072	ug/L	0 002	2	47	1079	1
>	Ge	72		ug/L			361384	364490	0
	Ni	60	0.654	ug/L	0 010	1	79	2072	1
	Ni	62	0.620	ug/L	0 063	10	55	339	8
	Cu	63	1.158	ug/L	0.026	2	184	8192	2
	Cu	65	1.147	ug/L	0.025	2	87	3871	1
	Zn	66	1.666	ug/L	0 057	3	440	3888	3
	Zn	67	1.746	ug/L	0.125	7	112	732	5
	Zn	68	1.515	ug/L	0 091	6	8394	10697	1
	As	75	0.510	ug/L	0.021	4	103	1214	4
	As-1	75	0.484	ug/L	0.036	7	11434	12560	0
	Se	82	0.007	ug/L	0.052	745	1	3	344
	Se	78	-0.104	ug/L	0.078	74	11678	11720	0
	Mo	98	0.025	ug/L	0.013	51	996	1208	8
	Y	89		ug/L			360432	360571	0
	Kr	83		ug/L			150	159	3
>	In	115		ug/L			393026	385463	0
	Ag	107	0.023	ug/L	0.005	23	26	329	21
	Cd	111	0.010	ug/L	0 002	18	183	214	3
	Cd	114	0.008	ug/L	0 001	14	9	68	12
	Sb	121	0.099	ug/L	0 003	2	17	1072	2
	Sb	123	0.099	ug/L	0.003	2	14	811	3
	Ba	135	4.465	ug/L	0.077	1	33	11159	1
	Ba	137	4.438	ug/L	0 056	1	61	19038	1
>	Tb	159		ug/L			440370	428322	0
	Tl	205	0.012	ug/L	0 002	17	35	383	16
	Pb	208	0.270	ug/L	0.021	7	412	11362	7
	Bi	209		ug/L			343603	341624	1
	Th	232	0.036	ug/L	0.001	2	145	1885	2
	U	238	0.012	ug/L	0 000	1	44	700	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 A REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, December 04, 2012 11:51:12
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens	Meas Intens	Intens. RSD
[>	Li	6		ug/L			300527	295063	1
[	Be	9	U 0.010	ug/L	0 008	85	5	8	37
	C	13		mg/L			5087	4998	0
	Cl	37		mg/L			2101848	2298099	0
[>	Sc	45		ug/L			261601	269414	1
[	V	51	0.465	ug/L	0.005	0	2510	8299	1
[	V-1	51	0.483	ug/L	0.023	4	1782	7891	1
[	Cr	52	0.267	ug/L	0.049	18	7847	11015	6
[	Cr	53	0.333	ug/L	0 035	10	654	1114	2
[	Mn	55	44.233	ug/L	1 018	2	312	802369	2
[	Co	59	0.068	ug/L	0 004	5	47	1055	6
[>	Ge	72		ug/L			361384	366732	0
[	Ni	60	0.665	ug/L	0.036	5	79	2119	4
[	Ni	62	0.643	ug/L	0.037	5	55	352	4
[	Cu	63	1.421	ug/L	0 034	2	184	10072	2
[	Cu	65	1.421	ug/L	0 023	1	87	4804	0
[	Zn	66	1.612	ug/L	0 071	4	440	3800	3
[	Zn	67	1.602	ug/L	0 057	3	112	685	3
[	Zn	68	1.636	ug/L	0.207	12	8394	10941	2
[	As	75	0.527	ug/L	0.025	4	103	1257	3
[	As-1	75	0.528	ug/L	0 198	37	11434	12730	2
[	Se	82	0.070	ug/L	0.036	50	1	19	44
[	Se	78	0.009	ug/L	0.771	8292	11678	11855	3
[	Mo	98	0.015	ug/L	0 004	24	996	1137	1
	Y	89		ug/L			360432	368228	1
	Kr	83		ug/L			150	147	3
[>	In	115		ug/L			393026	393347	1
[	Ag	107	0.010	ug/L	0.001	13	26	163	9
[	Cd	111	0.008	ug/L	0.003	38	183	211	6
[	Cd	114	0.006	ug/L	0 001	10	9	54	10
[	Sb	121	0.091	ug/L	0.004	4	17	1009	4
[	Sb	123	0.093	ug/L	0.003	3	14	780	4
[	Ba	135	4.375	ug/L	0 132	3	33	11155	1
[	Ba	137	4.425	ug/L	0 037	0	61	19368	1
[>	Tb	159		ug/L			440370	431581	2
[	Tl	205	0.006	ug/L	0 001	12	35	210	9
[	Pb	208	0.218	ug/L	0 006	2	412	9329	1
[	Bi	209		ug/L			343603	347038	0
[	Th	232	0.026	ug/L	0.001	4	145	1393	5
[	U	238	0.009	ug/L	0.001	7	44	557	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 ASPK REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, December 04, 2012 11:57:31
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			300527	294178	1
	Be	9	10.401	ug/L	0.209	2	5	4165	1
	C	13		mg/L			5087	4890	1
	Cl	37		mg/L			2101848	2316758	0
>	Sc	45		ug/L			261601	267580	0
	V	51	10.750	ug/L	0 311	2	2510	133642	2
	V-1	51	10.713	ug/L	0 288	2	1782	135299	2
	Cr	52	10.584	ug/L	0.417	3	7847	123310	2
	Cr	53	10.484	ug/L	0 213	2	654	14464	1
	Mn	55	56.781	ug/L	1 512	2	312	1022912	2
	Co	59	10.426	ug/L	0 149	1	47	152160	1
>	Ge	72		ug/L			361384	372031	0
	Ni	60	11.260	ug/L	0.096	0	79	35124	0
	Ni	62	11.443	ug/L	0.345	3	55	5404	2
	Cu	63	11.613	ug/L	0.037	0	184	82143	0
	Cu	65	11.681	ug/L	0.106	0	87	39412	1
	Zn	66	35.092	ug/L	0 275	0	440	74493	0
	Zn	67	32.170	ug/L	0.383	1	112	11747	0
	Zn	68	34.548	ug/L	0.603	1	8394	60560	1
	As	75	11.315	ug/L	0.045	0	103	25224	0
	As-1	75	11.015	ug/L	0.216	1	11434	35638	0
	Se	82	33.888	ug/L	0.116	0	1	8364	0
	Se	78	34.797	ug/L	0.738	2	11678	32025	0
	Mo	98	10.115	ug/L	0.072	0	996	85974	0
	Y	89		ug/L			360432	369979	1
	Kr	83		ug/L			150	159	1
>	In	115		ug/L			393026	397700	0
	Ag	107	9.962	ug/L	0.159	1	26	136276	2
	Cd	111	10.058	ug/L	0.086	0	183	34128	0
	Cd	114	9.979	ug/L	0.066	0	9	78138	0
	Sb	121	9.742	ug/L	0.073	0	17	107286	0
	Sb	123	9.701	ug/L	0.027	0	14	80680	0
	Ba	135	14.802	ug/L	0 030	0	33	38096	0
	Ba	137	14.829	ug/L	0 224	1	61	65487	1
>	Tb	159		ug/L			440370	436354	0
	Tl	205	10.210	ug/L	0.071	0	35	309059	0
	Pb	208	10.399	ug/L	0.106	1	412	430742	0
	Bi	209		ug/L			343603	344345	0
	Th	232	9.104	ug/L	0.007	0	145	447524	0
	U	238	9.759	ug/L	0 154	1	44	539101	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 B REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, December 04, 2012 12:03:49
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas Intens.	Intens. RSD
[>	Li	6		ug/L			300527	291349	1
[	Be	9	U 0.010	ug/L	0 008	82	5	8	37
	C	13		mg/L			5087	5120	0
	Cl	37		mg/L			2101848	2279135	0
[>	Sc	45		ug/L			261601	266121	1
[	V	51	0.429	ug/L	0.017	4	2510	7760	2
[	V-1	51	0.427	ug/L	0.009	2	1782	7098	0
[	Cr	52	0.255	ug/L	0.006	2	7847	10750	1
[	Cr	53	0.258	ug/L	0.029	11	654	1003	4
[	Mn	55	13.550	ug/L	0.174	1	312	243016	0
[	Co	59	0.042	ug/L	0.002	4	47	661	2
[>	Ge	72		ug/L			361384	370323	0
[	Ni	60	0.576	ug/L	0.017	2	79	1867	2
[	Ni	62	0.466	ug/L	0.077	16	55	273	13
[	Cu	63	1.109	ug/L	0.006	0	184	7978	0
[	Cu	65	1.106	ug/L	0.015	1	87	3797	1
[	Zn	66	1.114	ug/L	0.025	2	440	2791	1
[	Zn	67	1.089	ug/L	0 067	6	112	507	4
[	Zn	68	1.044	ug/L	0.099	9	8394	10163	1
[	As	75	0.500	ug/L	0 010	2	103	1211	2
[	As-1	75	0.552	ug/L	0.034	6	11434	12907	0
[	Se	82	0.032	ug/L	0.034	105	1	9	84
[	Se	78	0.183	ug/L	0 170	92	11678	12072	0
[	Mo	98	0.012	ug/L	0.006	50	996	1118	4
	Y	89		ug/L			360432	370060	1
	Kr	83		ug/L			150	154	6
[>	In	115		ug/L			393026	395233	0
[	Ag	107	0.012	ug/L	0 002	18	26	185	15
[	Cd	111	0.012	ug/L	0.002	18	183	225	4
[	Cd	114	0.006	ug/L	0 000	5	9	53	4
[	Sb	121	0.083	ug/L	0.003	3	17	930	2
[	Sb	123	0.082	ug/L	0 002	2	14	694	2
[	Ba	135	3.716	ug/L	0.048	1	33	9530	1
[	Ba	137	3.711	ug/L	0 060	1	61	16331	0
[>	Tb	159		ug/L			440370	433821	0
[	Tl	205	0.006	ug/L	0 000	4	35	218	3
[	Pb	208	0.130	ug/L	0.002	1	412	5764	1
[	Bi	209		ug/L			343603	343865	1
[	Th	232	0.042	ug/L	0.005	12	145	2184	11
[	U	238	0.010	ug/L	0.000	4	44	579	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS42R MBSPK REN
Sample Dil Factor: 2 BA 12/4/12
Comments:
Sample Date/Time: Tuesday, December 04, 2012 12:10:06
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc RSD	Blank Intens	Meas Intens	Intens. RSD
[>	**Li**	**6**		ug/L			300527	303395	0
[	**Be**	**9**	**24.006**	ug/L	0.509	2	5	9910	1
	C	**13**		mg/L			5087	5194	2
	Cl	**37**		mg/L			2101848	2270847	0
[>	**Sc**	**45**		ug/L			261601	272314	0
[	**V**	**51**	**24.944**	ug/L	0.568	2	2510	312151	1
[	**V-1**	**51**	**25.043**	ug/L	0 649	2	1782	319395	2
[	**Cr**	**52**	**25.056**	ug/L	0.437	1	7847	285956	1
[	**Cr**	**53**	**25.351**	ug/L	0.442	1	654	34629	1
[	**Mn**	**55**	**26.009**	ug/L	0.086	0	312	477074	0
[	**Co**	**59**	**25.665**	ug/L	0.461	1	47	381140	1
[>	**Ge**	**72**		ug/L			361384	379457	0
[	**Ni**	**60**	**26.155**	ug/L	0 332	1	79	83108	1
[	**Ni**	**62**	**26.641**	ug/L	0.159	0	55	12758	0
[	**Cu**	**63**	**26.911**	ug/L	0 340	1	184	193894	1
[	**Cu**	**65**	**27.032**	ug/L	0 242	0	87	92903	1
[	**Zn**	**66**	**80.583**	ug/L	1 287	1	440	173874	1
[	**Zn**	**67**	**72.541**	ug/L	0.437	0	112	26871	0
[	**Zn**	**68**	**79.302**	ug/L	1.357	1	8394	130361	1
[	**As**	**75**	**26.290**	ug/L	0 273	1	103	59633	1
[	**As-1**	**75**	**25.149**	ug/L	0.242	0	11434	67589	0
[	**Se**	**82**	**81.914**	ug/L	0 172	0	1	20618	0
[	**Se**	**78**	**82.613**	ug/L	0.292	0	11678	60703	0
[	**Mo**	**98**	**-0.104**	ug/L	0.001	1	996	159	5
	Y	**89**		ug/L			360432	378141	0
	Kr	**83**		ug/L			150	161	6
[>	**In**	**115**		ug/L			393026	404811	1
[	**Ag**	**107**	**25.862**	ug/L	0.329	1	26	360001	1
[	**Cd**	**111**	**24.640**	ug/L	0 496	2	183	84813	1
[	**Cd**	**114**	**24.317**	ug/L	0.336	1	9	193756	0
[	**Sb**	**121**	**0.007**	ug/L	0 001	10	17	98	7
[	**Sb**	**123**	**0.007**	ug/L	0 001	12	14	77	11
[	**Ba**	**135**	**25.060**	ug/L	0.224	0	33	65619	1
[	**Ba**	**137**	**25.224**	ug/L	0 555	2	61	113317	0
[>	**Tb**	**159**		ug/L			440370	450702	0
[	**Tl**	**205**	**24.934**	ug/L	0 077	0	35	779595	0
[	**Pb**	**208**	**25.014**	ug/L	0.130	0	412	1069669	0
[	**Bi**	**209**		ug/L			343603	358733	1
[	**Th**	**232**	**23.790**	ug/L	0.124	0	145	1207721	0
[	**U**	**238**	**23.412**	ug/L	0.195	0	44	1335816	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, December 04, 2012 12:16:24
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens	Meas. Intens.	Intens. RSD
⌈>	Li	6		ug/L			300527	302532	1
⌊	Be	9	24.689	ug/L	0.363	1	5	10163	1
	C	13		mg/L			5087	5842	2
	Cl	37		mg/L			2101848	2338587	0
⌈>	Sc	45		ug/L			261601	268995	0
|	V	51	26.385	ug/L	0.149	0	2510	326033	0
|	V-1	51	26.341	ug/L	0 190	0	1782	331774	0
|	Cr	52	26.114	ug/L	0 025	0	7847	294059	0
|	Cr	53	25.999	ug/L	0.287	1	654	35064	1
|	Mn	55	26.750	ug/L	0 176	0	312	484661	0
⌊	Co	59	25.892	ug/L	0 499	1	47	379789	1
⌈>	Ge	72		ug/L			361384	376043	0
|	Ni	60	26.486	ug/L	0.281	1	79	83399	0
|	Ni	62	26.553	ug/L	0 454	1	55	12603	2
|	Cu	63	27.337	ug/L	0 393	1	184	195193	1
|	Cu	65	27.319	ug/L	0 463	1	87	93037	1
|	Zn	66	83.724	ug/L	1.365	1	440	179008	1
|	Zn	67	75.855	ug/L	1.136	1	112	27839	0
|	Zn	68	80.456	ug/L	1 277	1	8394	130952	1
|	As	75	26.423	ug/L	0.430	1	103	59395	1
|	As-1	75	25.604	ug/L	0.031	0	11434	67979	0
|	Se	82	80.763	ug/L	1 002	1	1	20145	1
|	Se	78	82.552	ug/L	0.555	0	11678	60120	0
⌊	Mo	98	25.145	ug/L	0.401	1	996	214474	1
	Y	89		ug/L			360432	372955	0
	Kr	83		ug/L			150	158	1
⌈>	In	115		ug/L			393026	402472	1
|	Ag	107	24.822	ug/L	0.278	1	26	343542	0
|	Cd	111	24.592	ug/L	0.491	1	183	84158	0
|	Cd	114	24.417	ug/L	0.220	0	9	193455	0
|	Sb	121	24.256	ug/L	0.299	1	17	270276	0
|	Sb	123	24.200	ug/L	0 372	1	14	203626	0
|	Ba	135	25.683	ug/L	0.487	1	33	66858	0
⌊	Ba	137	25.534	ug/L	0.438	1	61	114064	0
⌈>	Tb	159		ug/L			440370	439182	0
|	Tl	205	25.493	ug/L	0 069	0	35	776685	0
|	Pb	208	25.558	ug/L	0.058	0	412	1065012	0
|	Bi	209		ug/L			343603	347888	0
|	Th	232	24.865	ug/L	0.136	0	145	1229991	0
⌊	U	238	24.248	ug/L	0.267	1	44	1348168	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 12:22:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas Intens.	Intens. RSD
[>	Li	6		ug/L			300527	306161	1
[	Be	9	48.370	ug/L	0 235	0	5	20146	1
	C	13		mg/L			5087	3263	2
	Cl	37		mg/L			2101848	2347960	0
[>	Sc	45		ug/L			261601	272630	0
[	V	51	48.463	ug/L	0.046	0	2510	604762	0
[	V-1	51	48.482	ug/L	0.292	0	1782	617356	0
[	Cr	52	48.690	ug/L	0.365	0	7847	548623	0
[	Cr	53	48.735	ug/L	0 809	1	654	66022	1
[	Mn	55	49.477	ug/L	0.296	0	312	908305	0
[	Co	59	49.364	ug/L	0.374	0	47	733904	0
[>	Ge	72		ug/L			361384	379226	0
[	Ni	60	49.424	ug/L	0 622	1	79	156870	0
[	Ni	62	49.772	ug/L	0.512	1	55	23770	0
[	Cu	63	49.245	ug/L	0 739	1	184	354410	0
[	Cu	65	49.010	ug/L	1 035	2	87	168241	1
[	Zn	66	49.660	ug/L	0 994	2	440	107268	2
[	Zn	67	49.618	ug/L	0.520	1	112	18405	0
[	Zn	68	49.173	ug/L	0.102	0	8394	84135	0
[	As	75	48.574	ug/L	0 231	0	103	110019	0
[	As-1	75	48.564	ug/L	0.346	0	11434	119269	0
[	Se	82	50.790	ug/L	0 909	1	1	12776	1
[	Se	78	50.928	ug/L	1 003	1	11678	42096	1
[	Mo	98	48.839	ug/L	0.114	0	996	419129	0
	Y	89		ug/L			360432	375066	0
	Kr	83		ug/L			150	170	4
[>	In	115		ug/L			393026	404531	0
[	Ag	107	48.966	ug/L	0.860	1	26	681160	1
[	Cd	111	49.143	ug/L	0.412	0	183	168877	0
[	Cd	114	48.432	ug/L	0.301	0	9	385702	1
[	Sb	121	48.276	ug/L	0.145	0	17	540696	0
[	Sb	123	47.902	ug/L	0 223	0	14	405167	0
[	Ba	135	48.640	ug/L	0.186	0	33	127254	0
[	Ba	137	48.349	ug/L	0 042	0	61	217060	0
[>	Tb	159		ug/L			440370	449972	0
[	Tl	205	48.520	ug/L	0.305	0	35	1514463	0
[	Pb	208	48.031	ug/L	0 544	1	412	2050148	0
[	Bi	209		ug/L			343603	354499	0
[	Th	232	48.308	ug/L	0.593	1	145	2448098	0
[	U	238	48.021	ug/L	0.552	1	44	2735436	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, December 04, 2012 12:29:21
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120412.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			300527	298010	1
[	Be	9	0.006	ug/L	0.009	134	5	7	44
	C	13		mg/L			5087	4284	1
	Cl	37		mg/L			2101848	2363689	0
[>	Sc	45		ug/L			261601	263335	0
|	V	51	0.003	ug/L	0.005	137	2510	2567	2
|	V-1	51	-0.001	ug/L	0.001	72	1782	1783	0
|	Cr	52	-0.004	ug/L	0.013	326	7847	7856	2
|	Cr	53	-0.017	ug/L	0.001	4	654	637	0
|	Mn	55	0.006	ug/L	0.003	51	312	413	12
[	Co	59	0.001	ug/L	0 000	13	47	67	3
[>	Ge	72		ug/L			361384	372829	0
|	Ni	60	0.001	ug/L	0.001	169	79	83	2
|	Ni	62	0.019	ug/L	0.017	85	55	65	11
|	Cu	63	0.006	ug/L	0.003	44	184	235	8
|	Cu	65	0.008	ug/L	0.003	39	87	116	8
|	Zn	66	0.035	ug/L	0.006	17	440	527	2
|	Zn	67	0.082	ug/L	0.030	37	112	146	7
|	Zn	68	-0.125	ug/L	0 083	66	8394	8471	1
|	As	75	0.001	ug/L	0.008	1355	103	108	17
|	As-1	75	0.065	ug/L	0.010	15	11434	11937	0
|	Se	82	-0.010	ug/L	0.029	294	1	0	1736
|	Se	78	0.226	ug/L	0.065	28	11678	12178	0
[	Mo	98	-0.106	ug/L	0.001	0	996	139	3
	Y	89		ug/L			360432	370597	0
	Kr	83		ug/L			150	154	1
[>	In	115		ug/L			393026	397525	0
|	Ag	107	0.016	ug/L	0 002	10	26	245	9
|	Cd	111	0.007	ug/L	0.007	93	183	210	11
|	Cd	114	0.001	ug/L	0 000	5	9	20	3
|	Sb	121	0.039	ug/L	0.011	27	17	450	26
|	Sb	123	0.036	ug/L	0 012	33	14	315	32
|	Ba	135	0.010	ug/L	0.004	39	33	60	16
[	Ba	137	0.005	ug/L	0.002	43	61	84	11
[>	Tb	159		ug/L			440370	437334	0
|	Tl	205	0.006	ug/L	0.002	24	35	230	20
|	Pb	208	0.010	ug/L	0.001	12	412	842	6
|	Bi	209		ug/L			343603	349819	0
|	Th	232	0.054	ug/L	0.009	16	145	2799	15
[	U	238	0.003	ug/L	0.000	13	44	204	10

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 12-6-12 **Analyst:** BA **Page:** 1 of 5

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD 0			2994-2
		1			2996-1
		2			-2
		3			-9
		4			-3
		Rinse sample			
		ICV			2955-7
		ICB			
		CCV1			
		CCB1			
		Low Check			
		ICSA			
		ICSAB			
		LR200			
		LR300			
		CCV2			
		CCB2			
		VS49 MB1	REN	2	Be Cu Ni
		VT32 BDUP		20	Cu Zn
		B			
		BSPK			Cu STL
		VS66 IDUP		5	Mn Ni Cu
		I			
		ISPK			Mn STL

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 12-6-12 **Analyst:** BA **Page:** 2 of 5

All corrections made by analyst unless otherwise noted. BA 12-7-12

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
✓		VS49 MBISPK	REN	2 ✓	Ba Ni Cu
	✓	VT53 MBSPK	↓	↓	Cu still ↑
	✓	VT65 MBISPK	↓	↓	↓
		CCV3			
		CCB3			
X	✓	VS66 A	REN	20	CCV (ISTD)
	✓	B	↓	5	↓
	✓	D	↓	↓	↓
	✓	F	↓	↓	↓
	✓	H	↓	↓	↓
	✓	J	↓	↓	↓
	✓	K	↓	↓	↓
	✓	L	↓	↓	↓
	✓	M	↓	↓	↓
	✓	VB80 C	↓	↓	↓
		CCV4			All ISTD ↑, Ni ↑
		CCB4			↓ ; As2, ^{78}Se ↓
		STD 0			
		CCV5			Ni ↑
		CCB5			
		VB80 D	REN	5	Cu Mn
		F	↓	↓	↓
		G	↓	↓	↓
		H	↓	↓	↓

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 12-6-12 **Analyst:** BA **Page:** 3 of 5

All corrections made by analyst unless otherwise noted. BA 12-7-12

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		VR80 EDUP	REN	5 ✓	Cr Mn
		E			BA 12/7/12
		ESPK		✓	
		VT65 ADUP		10 ✓	Zn
		A			
		ASPK		✓	Zn↑ (129%) (CAF)
		CCV6			Ni ↑
		CCB6			End VTMS
		VT79 MB	REN	2	
		VT81 MB			
		VS66 A		20	Cr Mn Zn
		B		10	Ni Cu
		D			
✓		VU18 A		2	As/Se issue (CCV)
✓		VU22 E			
		VT79 B			
		VU18 MBSPK		✓	Be
		VT79 MBSPK		✓	
		CCV7			^{82}Se ↑
		CCB7			
		VS66 F	REN	10	Ni Cu
		H			
		J			
		VR80 C		2	Cr Mn

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ICP/MS SAMPLE RUN LOG

PE Sciex ELAN 6000 Serial No. Z13960660

Analysis Date: 12-6-12 **Analyst:** BA **Page:** 4 **of** 5

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		VT99 ADUP	REN	2	
		A	↓	↓	
		ASPK			VZn
		VT81 A			
		MBSPK	↓	↓	
	✓	VT06 MB1SPK	SWN	20	CCVT issue
		CCV8			
		CCB8			End VR80
		VS66 K	REN	10	Ni Cu
		L	↓	↓	Ni Cu Zn As
		M	↓	↓	↓
		VT06 MB1	SWN	20	
		E	↓	↓	
		F			
		G			
		DDUP			
		D			
		DSPK	↓	↓	
		CCV9			
		CCB9			
		VT99 MB1	REN	2	
		MB2	↓	↓	
		VT06 H	SWN	20	
		I	↓	↓	

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP (ICP-MS) GFA CVA Analysis Date: 12-6-12

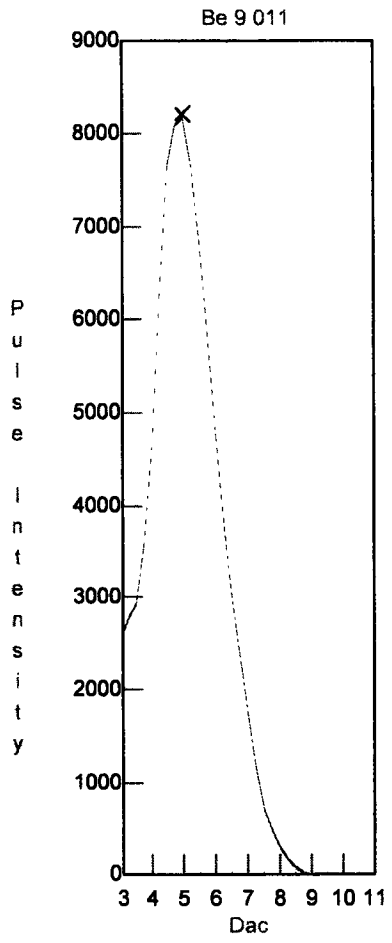
MST	Analyst BA 12/7/12	Peer [illegible] 12/7/12	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	See log
ICB/CCB	✓	✓	↓
Samples:			
RSD's & SD's	✓	—	See log
Internal Standards	✓	✓	See log
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	
Post Spikes/Serial Dilutions	—	—	
Analytic Spikes	—	-	
Matrix QC:			
SRM/LCS	✓	✓	See log
Matrix Spikes	✓	✓	↓
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's:	✓	✓	AN - VS66

CAF - VT65, VS49

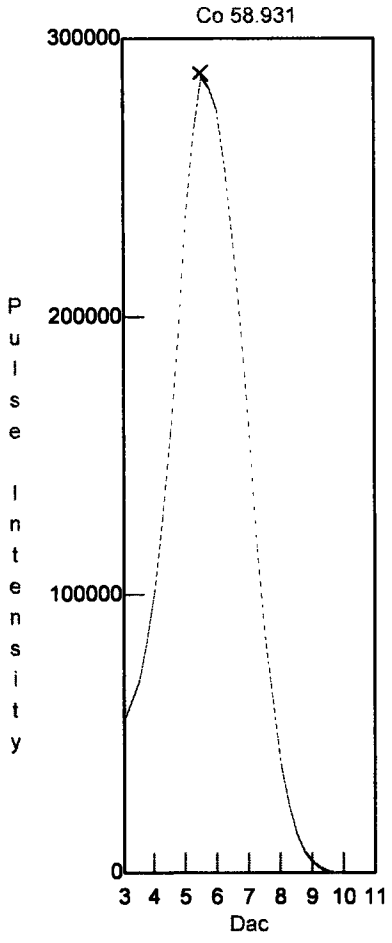
Instrument Tuning Report

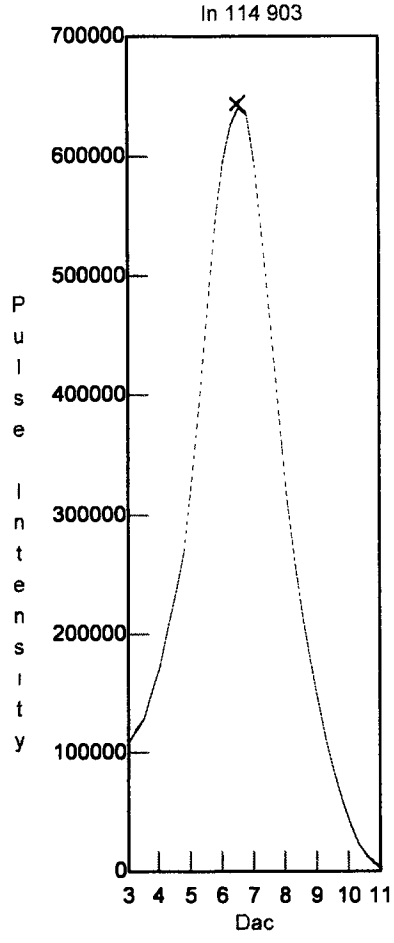
File Name: Default.tun
File Path: C:\Elandata\Tuning\Default.tun

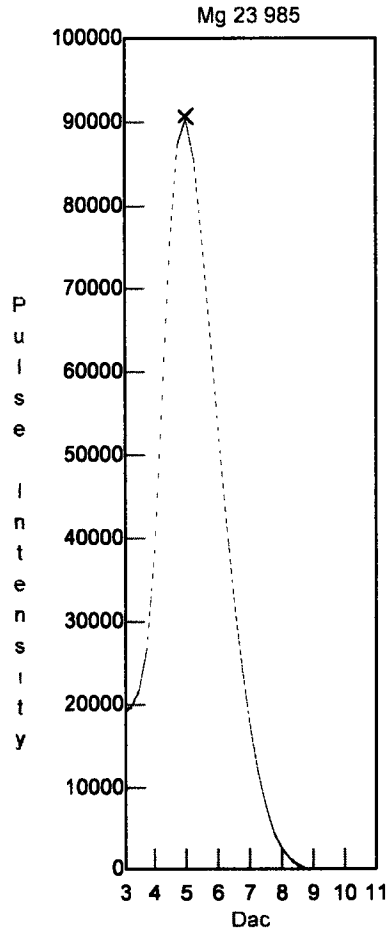
Analyte	Exact Mass	Meas. Mass	Mass DAC	Res. DAC	Meas. Pk. Width	Custom Res.
Be	9.012	9.026	2037	2158	0.716	
Mg	23.985	23.979	5660	2265	0.697	
Co	58.933	58.928	14154	2532	0.687	
In	114.904	114.878	27786	2979	0.684	
Pb	207.977	207.976	50440	3725	0.703	

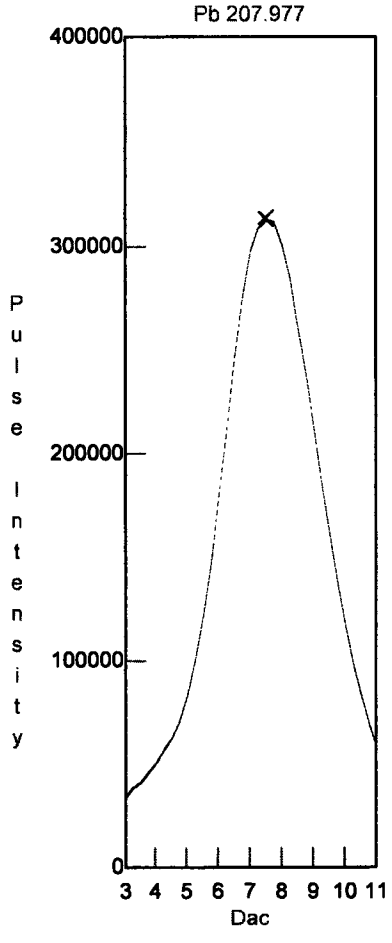

Be 9 011
Pulse Intensity
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
3 4 5 6 7 8 9 10 11
Dac

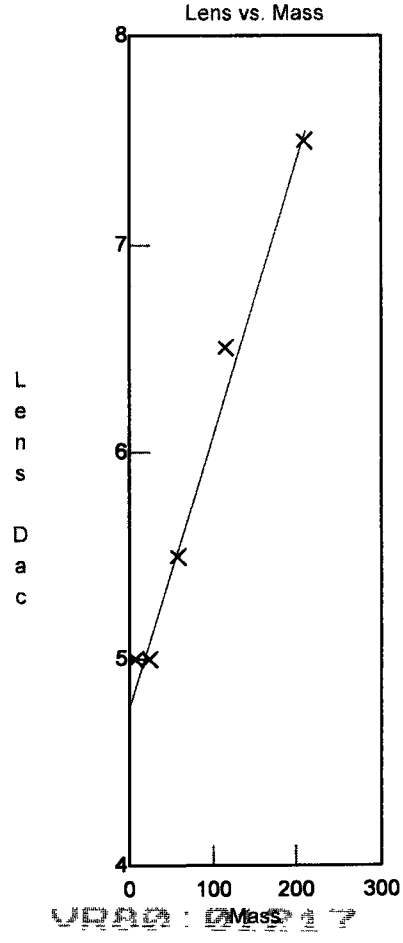
12-6-12


Co 58.931
Pulse Intensity
300000
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac


In 114 903
Pulse Intensity
700000
600000
500000
400000
300000
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac


Mg 23 985
Pulse Intensity
100000
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
3 4 5 6 7 8 9 10 11
Dac


Pb 207.977
Pulse Intensity
400000
300000
200000
100000
0
3 4 5 6 7 8 9 10 11
Dac


Lens vs. Mass
Lens Dac
8
7
6
5
4
0
100
200
300
Mass

Daily Performance Report

Sample ID: Sample
Sample Date/Time: Thursday, December 06, 2012 08:57:34
Sample Description:
Sample File: 1119.sam
Method File: C:\Elandata\Method\aridailyperf.mth
Dataset File: C:\Elandata\Dataset\daily performance\Sample.1226
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\Default.dac
Number of Replicates: 5
Dual Detector Mode: Dual

0.90

Summary

	Analyte	Mass	Net Intens. Mean	Net Intens. SD	Net Intens. RSD
	Mg	24	40342.600	446.484	1.107
	In	115	387060.633	5780.763	1.494
	Pb	208	206541.700	1613.797	0.781
⌈>	Ba	138	260567.593	2163.259	0.830
⌊	Ba++	69	0.015	0.000	1.467
⌈>	Ce	140	310716.184	1913.831	0.616
⌊	CeO	156	0.030	0.001	2.782
	Bkgd	220	21.002	5.109	24.325

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 09:22:17
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120512.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L				292757	0
	Be	9		ug/L				5	24
	C	13		mg/L				4311	1
	Cl	37		mg/L				2343605	1
>	Sc	45		ug/L				257316	0
	V	51		ug/L				2373	4
	V-1	51		ug/L				2147	3
	Cr	52		ug/L				7381	0
	Cr	53		ug/L				761	4
	Mn	55		ug/L				640	6
	Co	59		ug/L				63	10
>	Ge	72		ug/L				363321	0
	Ni	60		ug/L				88	12
	Ni	62		ug/L				64	4
	Cu	63		ug/L				253	3
	Cu	65		ug/L				125	12
	Zn	66		ug/L				541	4
	Zn	67		ug/L				143	8
	Zn	68		ug/L				9922	0
	As	75		ug/L				205	10
	As-1	75		ug/L				11472	0
	Se	82		ug/L				-11	117
	Se	78		ug/L				11623	0
	Mo	98		ug/L				810	16
	Y	89		ug/L				346311	0
	Kr	83		ug/L				168	4
>	In	115		ug/L				391639	0
	Ag	107		ug/L				31	8
	Cd	111		ug/L				203	5
	Cd	114		ug/L				20	34
	Sb	121		ug/L				25	22
	Sb	123		ug/L				18	14
	Ba	135		ug/L				41	22
	Ba	137		ug/L				63	18
>	Tb	159		ug/L				412432	0
	Tl	205		ug/L				46	10
	Pb	208		ug/L				581	3
	Bi	209		ug/L				345303	0
	Th	232		ug/L				111	4
	U	238		ug/L				37	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 09:28:26
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120512.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	296505	1
[	Be	9	10.000	ug/L	0.156	1	5	3598	0
	C	13		mg/L			4311	4406	3
	Cl	37		mg/L			2343605	2347517	0
[>	Sc	45		ug/L			257316	263132	0
|	V	51	10.000	ug/L	0.338	3	2373	123946	2
|	V-1	51	10.000	ug/L	0.250	2	2147	124878	1
|	Cr	52	10.000	ug/L	0.188	1	7381	117061	1
|	Cr	53	10.000	ug/L	0.078	0	761	13525	1
|	Mn	55	10.000	ug/L	0.171	1	640	179373	0
[	Co	59	10.000	ug/L	0.235	2	63	147539	1
[>	Ge	72		ug/L			363321	368230	0
|	Ni	60	10.000	ug/L	0.064	0	88	31455	0
|	Ni	62	10.000	ug/L	0.130	1	64	4841	1
|	Cu	63	10.000	ug/L	0.086	0	253	72068	1
|	Cu	65	10.000	ug/L	0.207	2	125	34780	2
|	Zn	66	10.000	ug/L	0.196	1	541	22612	2
|	Zn	67	10.000	ug/L	0.143	1	143	3847	1
|	Zn	68	10.000	ug/L	0.181	1	9922	25396	1
|	As	75	10.000	ug/L	0.038	0	205	21787	0
|	As-1	75	10.000	ug/L	0.097	0	11472	32887	0
|	Se	82	10.000	ug/L	0.157	1	-11	2366	2
|	Se	78	10.000	ug/L	0.155	1	11623	17513	0
[	Mo	98	10.000	ug/L	0.089	0	810	81731	1
	Y	89		ug/L			346311	350471	0
	Kr	83		ug/L			168	173	0
[>	In	115		ug/L			391639	393416	1
|	Ag	107	10.000	ug/L	0.232	2	31	137900	1
|	Cd	111	10.000	ug/L	0.174	1	203	33855	1
|	Cd	114	10.000	ug/L	0.096	0	20	77443	0
|	Sb	121	10.000	ug/L	0.055	0	25	107834	0
|	Sb	123	10.000	ug/L	0.178	1	18	81319	1
|	Ba	135	10.000	ug/L	0.223	2	41	24505	1
[	Ba	137	10.000	ug/L	0.162	1	63	42060	1
[>	Tb	159		ug/L			412432	413327	1
|	Tl	205	10.000	ug/L	0.060	0	46	296358	1
|	Pb	208	10.000	ug/L	0.048	0	581	405984	0
|	Bi	209		ug/L			345303	345376	0
|	Th	232	10.000	ug/L	0.164	1	111	463197	0
[	U	238	10.000	ug/L	0.060	0	37	509161	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 09:34:34
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120512.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	299436	2
[	Be	9	19.940	ug/L	0.364	1	5	7154	1
	C	13		mg/L			4311	4426	0
	Cl	37		mg/L			2343605	2335568	0
[>	Sc	45		ug/L			257316	267085	1
[	V	51	19.991	ug/L	0.114	0	2373	248633	1
[	V-1	51	20.040	ug/L	0.063	0	2147	253787	1
[	Cr	52	19.970	ug/L	0.297	1	7381	228299	0
[	Cr	53	20.118	ug/L	0.374	1	761	27446	2
[	Mn	55	20.101	ug/L	0.230	1	640	372816	1
[	Co	59	20.046	ug/L	0.477	2	63	302877	1
[>	Ge	72		ug/L			363321	369362	0
[	Ni	60	20.100	ug/L	0.238	1	88	64622	0
[	Ni	62	20.090	ug/L	0.427	2	64	9867	1
[	Cu	63	20.132	ug/L	0.341	1	253	149176	1
[	Cu	65	20.035	ug/L	0.262	1	125	70249	0
[	Zn	66	19.984	ug/L	0.031	0	541	44640	0
[	Zn	67	20.017	ug/L	0.350	1	143	7602	2
[	Zn	68	20.105	ug/L	0.392	1	9922	41680	1
[	As	75	20.009	ug/L	0.053	0	205	43593	0
[	As-1	75	20.062	ug/L	0.272	1	11472	54981	0
[	Se	82	20.127	ug/L	0.143	0	-11	4915	0
[	Se	78	20.302	ug/L	0.921	4	11623	24241	2
[	Mo	98	20.078	ug/L	0.162	0	810	166353	0
	Y	89		ug/L			346311	351070	0
	Kr	83		ug/L			168	161	1
[>	In	115		ug/L			391639	398883	1
[	Ag	107	20.000	ug/L	0.564	2	31	279602	1
[	Cd	111	19.979	ug/L	0.563	2	203	68072	1
[	Cd	114	20.048	ug/L	0.367	1	20	158883	0
[	Sb	121	19.962	ug/L	0.355	1	25	216539	0
[	Sb	123	19.939	ug/L	0.345	1	18	162391	0
[	Ba	135	20.072	ug/L	0.169	0	41	50561	1
[	Ba	137	20.074	ug/L	0.080	0	63	86831	1
[>	Tb	159		ug/L			412432	428202	1
[	Tl	205	20.031	ug/L	0.247	1	46	618837	1
[	Pb	208	20.004	ug/L	0.125	0	581	841466	1
[	Bi	209		ug/L			345303	357175	2
[	Th	232	20.050	ug/L	0.315	1	111	971948	2
[	U	238	20.050	ug/L	0.400	1	37	1068233	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 09:40:42
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120512.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	301772	1
[	Be	9	49.909	ug/L	0.789	1	5	17876	0
	C	13		mg/L			4311	3738	2
	Cl	37		mg/L			2343605	2310237	1
[>	Sc	45		ug/L			257316	267964	1
|	V	51	49.939	ug/L	0.336	0	2373	615740	1
|	V-1	51	49.935	ug/L	0.370	0	2147	627109	1
|	Cr	52	49.922	ug/L	0.380	0	7381	556818	1
|	Cr	53	49.911	ug/L	0.422	0	761	66556	1
|	Mn	55	49.943	ug/L	0.389	0	640	923191	1
[	Co	59	49.745	ug/L	0.269	0	63	735432	1
[>	Ge	72		ug/L			363321	367975	0
|	Ni	60	49.902	ug/L	0.620	1	88	158153	0
|	Ni	62	49.860	ug/L	1.043	2	64	23967	1
|	Cu	63	49.809	ug/L	0.646	1	253	360454	1
|	Cu	65	49.957	ug/L	1.168	2	125	173567	2
|	Zn	66	49.858	ug/L	0.520	1	541	108603	1
|	Zn	67	50.010	ug/L	0.253	0	143	18724	0
|	Zn	68	49.861	ug/L	0.687	1	9922	87042	1
|	As	75	49.955	ug/L	0.121	0	205	107636	0
|	As-1	75	49.890	ug/L	0.234	0	11472	117779	0
|	Se	82	49.943	ug/L	0.539	1	-11	12101	0
|	Se	78	49.715	ug/L	1.042	2	11623	41246	1
[	Mo	98	49.944	ug/L	0.300	0	810	408749	0
	Y	89		ug/L			346311	354788	2
	Kr	83		ug/L			168	159	4
[>	In	115		ug/L			391639	404095	1
|	Ag	107	49.705	ug/L	0.700	1	31	683811	0
|	Cd	111	49.779	ug/L	0.510	1	203	167825	1
|	Cd	114	49.788	ug/L	0.280	0	20	391451	1
|	Sb	121	49.839	ug/L	0.985	1	25	538941	0
|	Sb	123	49.824	ug/L	1.203	2	18	403885	0
|	Ba	135	49.828	ug/L	0.774	1	41	124928	0
[	Ba	137	49.742	ug/L	0.564	1	63	212379	0
[>	Tb	159		ug/L			412432	426484	1
|	Tl	205	49.882	ug/L	0.829	1	46	1517067	2
|	Pb	208	49.958	ug/L	0.561	1	581	2083485	2
|	Bi	209		ug/L			345303	353466	1
|	Th	232	50.374	ug/L	0.438	0	111	2526221	1
[	U	238	50.368	ug/L	0.534	1	37	2774947	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 09:46:51
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120512.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	284284	1
[	Be	9	100.060	ug/L	1.885	1	5	33822	0
	C	13		mg/L			4311	4090	2
	Cl	37		mg/L			2343605	2406931	1
[>	Sc	45		ug/L			257316	254862	1
[	V	51	100.410	ug/L	2.244	2	2373	1191352	2
[	V-1	51	100.331	ug/L	1.188	1	2147	1209525	1
[	Cr	52	100.546	ug/L	3.167	3	7381	1078723	3
[	Cr	53	100.301	ug/L	1.301	1	761	127707	0
[	Mn	55	99.900	ug/L	1.355	1	640	1749741	0
[	Co	59	100.153	ug/L	2.003	2	63	1415124	0
[>	Ge	72		ug/L			363321	358323	0
[	Ni	60	99.412	ug/L	1.293	1	88	300825	1
[	Ni	62	99.084	ug/L	0.701	0	64	44949	0
[	Cu	63	99.365	ug/L	1.379	1	253	685502	1
[	Cu	65	99.669	ug/L	0.842	0	125	333411	0
[	Zn	66	99.372	ug/L	0.855	0	541	205940	0
[	Zn	67	99.574	ug/L	0.806	0	143	35657	1
[	Zn	68	99.775	ug/L	0.434	0	9922	158699	0
[	As	75	99.915	ug/L	0.518	0	205	208844	0
[	As-1	75	99.882	ug/L	0.651	0	11472	217469	0
[	Se	82	98.947	ug/L	0.316	0	-11	22566	0
[	Se	78	98.831	ug/L	1.096	1	11623	66382	0
[	Mo	98	100.045	ug/L	0.435	0	810	797703	0
	Y	89		ug/L			346311	330699	0
	Kr	83		ug/L			168	187	5
[>	In	115		ug/L			391639	381072	1
[	Ag	107	100.122	ug/L	1.830	1	31	1304267	0
[	Cd	111	100.264	ug/L	0.484	0	203	321446	1
[	Cd	114	100.088	ug/L	0.938	0	20	744278	1
[	Sb	121	100.940	ug/L	0.755	0	25	1062822	0
[	Sb	123	100.786	ug/L	0.923	0	18	791363	1
[	Ba	135	100.345	ug/L	2.342	2	41	240000	2
[	Ba	137	100.173	ug/L	1.386	1	63	405648	1
[>	Tb	159		ug/L			412432	391785	1
[	Tl	205	100.722	ug/L	0.909	0	46	2882954	0
[	Pb	208	100.095	ug/L	3.146	3	581	3845172	1
[	Bi	209		ug/L			345303	322205	1
[	Th	232	100.146	ug/L	2.537	2	111	4635215	1
[	U	238	100.085	ug/L	1.501	1	37	5078906	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse Sample
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 09:53:29
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120512.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	286752	0
[	Be	9	0.000	ug/L	0.004	1232	5	5	24
	C	13		mg/L			4311	4300	3
	Cl	37		mg/L			2343605	2436326	0
[>	Sc	45		ug/L			257316	258694	1
[	V	51	-0.002	ug/L	0.003	158	2373	2367	1
[	V-1	51	-0.013	ug/L	0.004	31	2147	1998	3
[	Cr	52	-0.001	ug/L	0.022	1573	7381	7403	1
[	Cr	53	-0.036	ug/L	0.014	38	761	718	1
[	Mn	55	-0.005	ug/L	0.003	54	640	560	9
[	Co	59	0.000	ug/L	0.000	5	63	70	1
[>	Ge	72		ug/L			363321	366884	0
[	Ni	60	-0.000	ug/L	0.004	1418	88	88	13
[	Ni	62	0.012	ug/L	0.006	49	64	70	4
[	Cu	63	-0.004	ug/L	0.003	80	253	230	9
[	Cu	65	-0.001	ug/L	0.005	485	125	122	12
[	Zn	66	-0.015	ug/L	0.009	62	541	514	3
[	Zn	67	-0.020	ug/L	0.032	160	143	137	9
[	Zn	68	0.045	ug/L	0.039	86	9922	10087	0
[	As	75	-0.000	ug/L	0.015	3186	205	206	14
[	As-1	75	0.045	ug/L	0.020	44	11472	11680	0
[	Se	82	0.006	ug/L	0.012	220	-11	-10	26
[	Se	78	0.187	ug/L	0.084	44	11623	11843	0
[	Mo	98	-0.043	ug/L	0.008	18	810	463	13
	Y	89		ug/L			346311	342468	0
	Kr	83		ug/L			168	172	5
[>	In	115		ug/L			391639	395115	0
[	Ag	107	0.016	ug/L	0.004	26	31	252	23
[	Cd	111	-0.001	ug/L	0.003	594	203	202	6
[	Cd	114	0.000	ug/L	0.001	201	20	23	25
[	Sb	121	0.060	ug/L	0.014	23	25	678	22
[	Sb	123	0.059	ug/L	0.015	26	18	495	25
[	Ba	135	0.007	ug/L	0.004	56	41	60	17
[	Ba	137	0.005	ug/L	0.001	23	63	83	5
[>	Tb	159		ug/L			412432	397644	1
[	Tl	205	0.012	ug/L	0.002	18	46	380	16
[	Pb	208	0.007	ug/L	0.003	38	581	829	13
[	Bi	209		ug/L			345303	336035	2
[	Th	232	0.068	ug/L	0.012	17	111	3285	17
[	U	238	0.003	ug/L	0.001	30	37	169	24

Quantitative Analysis - Calibration Report

Sample Date/Time: Thursday, December 06, 2012 09:46:51
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

Analyte	Mass	r Corr Coeff	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	1.0000	0.0012	10	20	50	100	
C	13							
Cl	37							
Sc	45							
V	51	1.0000	0.0465	10	20	50	100	
V-1	51	1.0000	0.0472	10	20	50	100	
Cr	52	0.9999	0.0418	10	20	50	100	
Cr	53	1.0000	0.0050	10	20	50	100	
Mn	55	1.0000	0.0687	10	20	50	100	
Co	59	1.0000	0.0554	10	20	50	100	
Ge	72							
Ni	60	0.9999	0.0084	10	20	50	100	
Ni	62	0.9999	0.0013	10	20	50	100	
Cu	63	0.9999	0.0192	10	20	50	100	
Cu	65	1.0000	0.0093	10	20	50	100	
Zn	66	0.9999	0.0058	10	20	50	100	
Zn	67	1.0000	0.0010	10	20	50	100	
Zn	68	1.0000	0.0042	10	20	50	100	
As	75	1.0000	0.0058	10	20	50	100	
As-1	75	1.0000	0.0058	10	20	50	100	
Se	82	0.9998	0.0006	10	20	50	100	
Se	78	0.9997	0.0016	10	20	50	100	
Mo	98	1.0000	0.0222	10	20	50	100	
Y	89							
Kr	83							
In	115							
Ag	107	1.0000	0.0342	10	20	50	100	
Cd	111	1.0000	0.0084	10	20	50	100	
Cd	114	1.0000	0.0195	10	20	50	100	
Sb	121	0.9998	0.0276	10	20	50	100	
Sb	123	0.9999	0.0206	10	20	50	100	
Ba	135	1.0000	0.0063	10	20	50	100	
Ba	137	1.0000	0.0106	10	20	50	100	
Tb	159							
Tl	205	0.9999	0.0731	10	20	50	100	
Pb	208	1.0000	0.0981	10	20	50	100	
Bi	209							
Th	232	1.0000	0.1182	10	20	50	100	
U	238	1.0000	0.1295	10	20	50	100	

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 10:02:47
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	299708	0
[	Be	9	50.151	ug/L	0.516	1	5	17879	1
	C	13		mg/L			4311	8348	3
	Cl	37		mg/L			2343605	2435803	1
[>	Sc	45		ug/L			257316	271004	0
[	V	51	49.512	ug/L	0.605	1	2373	625959	1
[	V-1	51	49.562	ug/L	0.668	1	2147	636502	1
[	Cr	52	48.512	ug/L	0.193	0	7381	557497	0
[	Cr	53	48.711	ug/L	0.600	1	761	66368	0
[	Mn	55	49.304	ug/L	0.104	0	640	918700	0
[	Co	59	48.863	ug/L	1.245	2	63	734272	2
[>	Ge	72		ug/L			363321	375061	0
[	Ni	60	49.882	ug/L	0.836	1	88	158032	0
[	Ni	62	50.025	ug/L	0.754	1	64	23785	1
[	Cu	63	50.002	ug/L	0.427	0	253	361182	0
[	Cu	65	49.590	ug/L	0.889	1	125	173692	1
[	Zn	66	50.094	ug/L	0.758	1	541	108946	1
[	Zn	67	49.635	ug/L	1.275	2	143	18678	2
[	Zn	68	48.276	ug/L	0.226	0	9922	85659	0
[	As	75	50.425	ug/L	0.655	1	205	110420	0
[	As-1	75	49.785	ug/L	0.389	0	11472	119394	0
[	Se	82	78.891	ug/L	1.131	1	-11	18829	0
[	Se	78	77.738	ug/L	1.577	2	11623	57214	1
[	Mo	98	48.402	ug/L	0.181	0	810	404388	0
	Y	89		ug/L			346311	350281	1
	Kr	83		ug/L			168	178	0
[>	In	115		ug/L			391639	400688	1
[	Ag	107	50.623	ug/L	0.749	1	31	693425	0
[	Cd	111	49.365	ug/L	0.774	1	203	166497	1
[	Cd	114	49.103	ug/L	0.444	0	20	383944	1
[	Sb	121	48.694	ug/L	1.003	2	25	539056	0
[	Sb	123	48.948	ug/L	0.761	1	18	404099	0
[	Ba	135	49.462	ug/L	0.335	0	41	124413	0
[	Ba	137	49.287	ug/L	0.880	1	63	209869	0
[>	Tb	159		ug/L			412432	414908	1
[	Tl	205	48.420	ug/L	0.122	0	46	1467871	1
[	Pb	208	49.326	ug/L	0.726	1	581	2007306	0
[	Bi	209		ug/L			345303	345791	0
[	Th	232	50.850	ug/L	1.103	2	111	2492680	1
[	U	238	50.755	ug/L	0.940	1	37	2727483	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 10:09:25
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	291641	1
[	Be	9	0.003	ug/L	0.015	579	5	6	75
	C	13		mg/L			4311	4325	1
	Cl	37		mg/L			2343605	2418459	0
[>	Sc	45		ug/L			257316	262180	1
|	V	51	-0.008	ug/L	0.010	124	2373	2318	3
|	V-1	51	-0.027	ug/L	0.005	19	2147	1852	2
|	Cr	52	-0.003	ug/L	0.018	529	7381	7482	1
|	Cr	53	-0.061	ug/L	0.010	16	761	696	2
|	Mn	55	-0.007	ug/L	0.003	45	640	521	9
[	Co	59	0.001	ug/L	0.001	87	63	79	15
[>	Ge	72		ug/L			363321	367902	2
|	Ni	60	-0.000	ug/L	0.003	2291	88	89	12
|	Ni	62	0.010	ug/L	0.032	309	64	70	23
|	Cu	63	-0.001	ug/L	0.003	337	253	250	9
|	Cu	65	-0.002	ug/L	0.008	499	125	121	20
|	Zn	66	-0.005	ug/L	0.017	323	541	537	4
|	Zn	67	-0.034	ug/L	0.052	154	143	132	12
|	Zn	68	0.056	ug/L	0.267	479	9922	10126	1
|	As	75	0.002	ug/L	0.015	665	205	213	15
|	As-1	75	0.130	ug/L	0.146	112	11472	11887	0
|	Se	82	0.011	ug/L	0.018	166	-11	-9	42
|	Se	78	0.490	ug/L	0.535	109	11623	12044	0
[	Mo	98	-0.067	ug/L	0.004	6	810	271	10
	Y	89		ug/L			346311	343608	1
	Kr	83		ug/L			168	171	2
[>	In	115		ug/L			391639	396616	1
|	Ag	107	0.011	ug/L	0.003	24	31	179	19
|	Cd	111	0.005	ug/L	0.002	45	203	221	3
|	Cd	114	0.001	ug/L	0.001	113	20	26	24
|	Sb	121	0.015	ug/L	0.004	28	25	187	24
|	Sb	123	0.015	ug/L	0.002	12	18	145	10
|	Ba	135	0.003	ug/L	0.003	95	41	50	16
[	Ba	137	0.004	ug/L	0.001	34	63	81	6
[>	Tb	159		ug/L			412432	407359	1
|	Tl	205	0.005	ug/L	0.001	28	46	189	22
|	Pb	208	0.004	ug/L	0.002	36	581	754	10
|	Bi	209		ug/L			345303	341464	0
|	Th	232	0.042	ug/L	0.006	13	111	2113	14
[	U	238	0.003	ug/L	0.000	9	37	180	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 10:15:13
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			292757	295991	1
	Be	9	50.507	ug/L	1.278	2	5	17777	1
	C	13		mg/L			4311	3759	0
	Cl	37		mg/L			2343605	2419741	0
>	Sc	45		ug/L			257316	268348	0
	V	51	48.236	ug/L	0.209	0	2373	603902	0
	V-1	51	48.555	ug/L	0.455	0	2147	617502	0
	Cr	52	48.324	ug/L	0.167	0	7381	549925	0
	Cr	53	49.290	ug/L	0.933	1	761	66491	1
	Mn	55	48.938	ug/L	0.354	0	640	902926	0
	Co	59	49.422	ug/L	0.824	1	63	735433	1
>	Ge	72		ug/L			363321	365412	1
	Ni	60	50.841	ug/L	0.899	1	88	156922	1
	Ni	62	51.112	ug/L	0.797	1	64	23673	0
	Cu	63	50.804	ug/L	0.469	0	253	357517	0
	Cu	65	50.237	ug/L	0.837	1	125	171424	1
	Zn	66	51.327	ug/L	1.428	2	541	108721	1
	Zn	67	50.985	ug/L	0.834	1	143	18687	0
	Zn	68	50.604	ug/L	1.200	2	9922	86986	1
	As	75	50.598	ug/L	0.952	1	205	107940	0
	As-1	75	50.489	ug/L	0.858	1	11472	117794	0
	Se	82	50.919	ug/L	0.928	1	-11	11835	0
	Se	78	50.522	ug/L	0.567	1	11623	40317	0
	Mo	98	49.878	ug/L	0.982	1	810	405926	1
	Y	89		ug/L			346311	344649	1
	Kr	83		ug/L			168	173	3
>	In	115		ug/L			391639	393722	1
	Ag	107	50.274	ug/L	0.964	1	31	676669	1
	Cd	111	50.081	ug/L	0.435	0	203	165979	1
	Cd	114	50.560	ug/L	0.387	0	20	388457	0
	Sb	121	49.733	ug/L	0.230	0	25	541058	1
	Sb	123	49.937	ug/L	0.517	1	18	405100	0
	Ba	135	49.299	ug/L	0.483	0	41	121841	0
	Ba	137	49.324	ug/L	1.115	2	63	206364	0
>	Tb	159		ug/L			412432	408204	0
	Tl	205	48.617	ug/L	0.708	1	46	1449895	1
	Pb	208	49.360	ug/L	0.944	1	581	1976252	1
	Bi	209		ug/L			345303	341865	0
	Th	232	49.810	ug/L	1.299	2	111	2402230	1
	U	238	50.144	ug/L	0.828	1	37	2651446	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 10:21:52
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	292275	0
[	Be	9	0.005	ug/L	0.006	128	5	7	28
	C	13		mg/L			4311	4205	0
	Cl	37		mg/L			2343605	2439474	0
[>	Sc	45		ug/L			257316	265126	1
[	V	51	-0.010	ug/L	0.004	39	2373	2326	2
[	V-1	51	-0.033	ug/L	0.004	11	2147	1797	1
[	Cr	52	-0.004	ug/L	0.005	122	7381	7563	1
[	Cr	53	-0.075	ug/L	0.021	28	761	685	3
[	Mn	55	-0.007	ug/L	0.003	40	640	530	10
[	Co	59	0.001	ug/L	0.001	69	63	77	11
[>	Ge	72		ug/L			363321	370951	1
[	Ni	60	0.005	ug/L	0.004	86	88	105	14
[	Ni	62	0.001	ug/L	0.014	2446	64	65	11
[	Cu	63	-0.001	ug/L	0.005	541	253	252	15
[	Cu	65	-0.006	ug/L	0.006	102	125	106	18
[	Zn	66	-0.004	ug/L	0.005	144	541	545	3
[	Zn	67	-0.064	ug/L	0.016	25	143	123	6
[	Zn	68	-0.037	ug/L	0.141	381	9922	10071	0
[	As	75	0.004	ug/L	0.008	215	205	218	6
[	As-1	75	0.113	ug/L	0.129	114	11472	11950	0
[	Se	82	0.063	ug/L	0.049	77	-11	2	410
[	Se	78	0.417	ug/L	0.433	103	11623	12104	0
[	Mo	98	-0.075	ug/L	0.004	5	810	206	17
	Y	89		ug/L			346311	350776	0
	Kr	83		ug/L			168	159	2
[>	In	115		ug/L			391639	394565	0
[	Ag	107	0.011	ug/L	0.003	24	31	177	19
[	Cd	111	0.006	ug/L	0.002	24	203	224	2
[	Cd	114	0.000	ug/L	0.001	216	20	23	25
[	Sb	121	0.029	ug/L	0.007	24	25	346	22
[	Sb	123	0.029	ug/L	0.006	19	18	251	17
[	Ba	135	0.004	ug/L	0.006	152	41	51	27
[	Ba	137	0.004	ug/L	0.001	28	63	82	5
[>	Tb	159		ug/L			412432	407863	0
[	Tl	205	0.006	ug/L	0.002	26	46	227	20
[	Pb	208	0.005	ug/L	0.001	21	581	793	5
[	Bi	209		ug/L			345303	341739	1
[	Th	232	0.049	ug/L	0.008	16	111	2470	15
[	U	238	0.002	ug/L	0.001	36	37	165	28

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 10:27:40
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	281928	1
[	Be	9	0.193	ug/L	0.048	24	5	70	23
	C	13		mg/L			4311	4378	2
	Cl	37		mg/L			2343605	2428841	0
[>	Sc	45		ug/L			257316	254636	2
[	V	51	0.219	ug/L	0.010	4	2373	4936	5
[	V-1	51	0.189	ug/L	0.002	1	2147	4391	2
[	Cr	52	0.527	ug/L	0.014	2	7381	12915	1
[	Cr	53	0.421	ug/L	0.045	10	761	1285	1
[	Mn	55	0.511	ug/L	0.020	3	640	9571	0
[	Co	59	0.207	ug/L	0.005	2	63	2985	1
[>	Ge	72		ug/L			363321	351334	0
[	Ni	60	0.522	ug/L	0.029	5	88	1632	5
[	Ni	62	0.493	ug/L	0.018	3	64	280	2
[	Cu	63	0.538	ug/L	0.011	1	253	3880	2
[	Cu	65	0.547	ug/L	0.015	2	125	1914	3
[	Zn	66	4.231	ug/L	0.052	1	541	9097	0
[	Zn	67	3.614	ug/L	0.254	7	143	1403	6
[	Zn	68	4.391	ug/L	0.041	0	9922	16019	0
[	As	75	0.225	ug/L	0.015	6	205	660	4
[	As-1	75	0.614	ug/L	0.015	2	11472	12336	0
[	Se	82	0.590	ug/L	0.122	20	-11	120	22
[	Se	78	2.065	ug/L	0.100	4	11623	12364	0
[	Mo	98	0.122	ug/L	0.006	4	810	1733	3
	Y	89		ug/L			346311	332157	1
	Kr	83		ug/L			168	166	4
[>	In	115		ug/L			391639	378287	1
[	Ag	107	0.217	ug/L	0.008	3	31	2832	3
[	Cd	111	0.112	ug/L	0.003	3	203	552	3
[	Cd	114	0.111	ug/L	0.004	3	20	840	3
[	Sb	121	0.215	ug/L	0.007	3	25	2270	1
[	Sb	123	0.217	ug/L	0.005	2	18	1706	0
[	Ba	135	0.495	ug/L	0.011	2	41	1215	0
[	Ba	137	0.508	ug/L	0.005	1	63	2103	1
[>	Tb	159		ug/L			412432	391381	0
[	Tl	205	0.213	ug/L	0.002	0	46	6121	0
[	Pb	208	0.106	ug/L	0.002	1	581	4617	2
[	Bi	209		ug/L			345303	327326	1
[	Th	232	0.223	ug/L	0.005	2	111	10412	1
[	U	238	0.195	ug/L	0.003	1	37	9936	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 10:33:28
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	281352	0
[	Be	9	-0.003	ug/L	0.011	365	5	4	83
	C	13		mg/L			4311	13866	0
	Cl	37		mg/L			2343605	3799860	1
[>	Sc	45		ug/L			257316	244739	1
|	V	51	0.038	ug/L	0.038	101	2373	2687	16
|	V-1	51	0.511	ug/L	0.022	4	2147	7940	1
|	Cr	52	0.502	ug/L	0.027	5	7381	12153	1
|	Cr	53	1.917	ug/L	0.165	8	761	3053	5
|	Mn	55	0.067	ug/L	0.004	5	640	1736	2
[	Co	59	0.022	ug/L	0.001	4	63	363	3
[>	Ge	72		ug/L			363321	350268	1
|	Ni	60	0.506	ug/L	0.028	5	88	1579	4
|	Ni	62	3.769	ug/L	0.053	1	64	1730	0
|	Cu	63	0.479	ug/L	0.022	4	253	3474	5
|	Cu	65	0.551	ug/L	0.021	3	125	1922	3
|	Zn	66	1.161	ug/L	0.012	1	541	2867	2
|	Zn	67	1.734	ug/L	0.027	1	143	743	3
|	Zn	68	0.236	ug/L	0.082	34	9922	9909	2
|	As	75	0.104	ug/L	0.021	20	205	410	12
|	As-1	75	0.245	ug/L	0.031	12	11472	11554	1
|	Se	82	0.006	ug/L	0.029	478	-11	-10	65
|	Se	78	0.690	ug/L	0.204	29	11623	11579	0
[	Mo	98	406.427 ✓	ug/L	1.539	0	810	3165499	2
	Y	89		ug/L			346311	329028	0
	Kr	83		ug/L			168	197	0
[>	In	115		ug/L			391639	364623	1
|	Ag	107	0.029	ug/L	0.003	10	31	395	7
|	Cd	111	0.096	ug/L	0.081	84	203	482	49
|	Cd	114	0.735	ug/L	0.024	3	20	5246	4
|	Sb	121	0.069	ug/L	0.001	1	25	716	3
|	Sb	123	0.070	ug/L	0.004	6	18	542	5
|	Ba	135	0.046	ug/L	0.009	19	41	143	12
[	Ba	137	0.049	ug/L	0.005	10	63	249	6
[>	Tb	159		ug/L			412432	400310	0
|	Tl	205	0.033	ug/L	0.002	6	46	1020	5
|	Pb	208	0.036	ug/L	0.002	4	581	1996	3
|	Bi	209		ug/L			345303	324571	0
|	Th	232	0.108	ug/L	0.018	17	111	5194	16
[	U	238	0.001	ug/L	0.000	20	37	96	12

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 10:39:46
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	274223	1
[	Be	9	0.001	ug/L	0.009	811	5	5	49
	C	13		mg/L			4311	13455	1
	Cl	37		mg/L			2343605	3564316	1
[>	Sc	45		ug/L			257316	235866	0
[	V	51	-0.459	ug/L	0.100	21	2373	-2859	38
[	V-1	51	0.540	ug/L	0.005	1	2147	7983	0
[	Cr	52	19.631	ug/L	0.063	0	7381	200379	0
[	Cr	53	21.691	ug/L	0.297	1	761	26110	1
[	Mn	55	19.617	ug/L	0.175	0	640	318494	0
[	Co	59	19.826	ug/L	0.335	1	63	259360	1
[>	Ge	72		ug/L			363321	339158	0
[	Ni	60	19.736	ug/L	0.117	0	88	56594	0
[	Ni	62	22.768	ug/L	0.066	0	64	9822	0
[	Cu	63	19.672	ug/L	0.122	0	253	128639	0
[	Cu	65	19.343	ug/L	0.288	1	125	61338	1
[	Zn	66	19.877	ug/L	0.323	1	541	39395	1
[	Zn	67	18.009	ug/L	0.326	1	143	6213	1
[	Zn	68	18.518	ug/L	0.254	1	9922	35421	0
[	As	75	19.484	ug/L	0.080	0	205	38702	0
[	As-1	75	19.924	ug/L	0.141	0	11472	49632	0
[	Se	82	-0.005	ug/L	0.068	1324	-11	-12	119
[	Se	78	0.904	ug/L	0.229	25	11623	11325	0
[	Mo	98	402.787 ✓	ug/L	2.423	0	810	3037578	0
	Y	89		ug/L			346311	322787	1
	Kr	83		ug/L			168	183	3
[>	In	115		ug/L			391639	355042	1
[	Ag	107	19.781	ug/L	0.365	1	31	240120	1
[	Cd	111	19.704	ug/L	0.239	1	203	59002	1
[	Cd	114	20.446	ug/L	0.007	0	20	141677	1
[	Sb	121	0.064	ug/L	0.002	3	25	649	3
[	Sb	123	0.067	ug/L	0.004	5	18	507	3
[	Ba	135	0.044	ug/L	0.008	18	41	135	12
[	Ba	137	0.038	ug/L	0.002	5	63	202	3
[>	Tb	159		ug/L			412432	389353	0
[	Tl	205	0.030	ug/L	0.002	6	46	899	5
[	Pb	208	0.027	ug/L	0.003	9	581	1565	6
[	Bi	209		ug/L			345303	323110	0
[	Th	232	0.050	ug/L	0.001	2	111	2427	2
[	U	238	0.001	ug/L	0.000	23	37	95	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 10:46:03
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	278150	0
[	Be	9	201.099	ug/L	1.581	0	5	66518	1
	C	13		mg/L			4311	4302	2
	Cl	37		mg/L			2343605	2159444	1
[>	Sc	45		ug/L			257316	238298	2
[	V	51	203.546	ug/L	2.354	1	2373	2255480	1
[	V-1	51	204.282	ug/L	2.307	1	2147	2300254	1
[	Cr	52	195.213	ug/L	1.069	0	7381	1951824	2
[	Cr	53	197.856	ug/L	0.976	0	761	234874	2
[	Mn	55	203.401	ug/L	3.825	1	640	3329989	1
[	Co	59	204.661	ug/L	2.250	1	63	2703863	1
[>	Ge	72		ug/L			363321	342182	1
[	Ni	60	191.132	ug/L	2.370	1	88	552280	2
[	Ni	62	192.898	ug/L	2.670	1	64	83509	2
[	Cu	63	187.073	ug/L	0.908	0	253	1232190	1
[	Cu	65	188.262	ug/L	0.061	0	125	601299	1
[	Zn	66	191.315	ug/L	1.730	0	541	378134	0
[	Zn	67	188.955	ug/L	0.614	0	143	64496	1
[	Zn	68	189.211	ug/L	0.840	0	9922	279008	0
[	As	75	198.168	ug/L	2.696	1	205	395321	0
[	As-1	75	197.397	ug/L	2.490	1	11472	399833	0
[	Se	82	198.467	ug/L	2.326	1	-11	43231	0
[	Se	78	195.697	ug/L	2.728	1	11623	114786	0
[	Mo	98	200.239	ug/L	2.091	1	810	1523896	1
	Y	89		ug/L			346311	323476	2
	Kr	83		ug/L			168	194	1
[>	In	115		ug/L			391639	361659	0
[	Ag	107	204.176	ug/L	0.845	0	31	2524545	0
[	Cd	111	197.090	ug/L	3.332	1	203	599485	1
[	Cd	114	197.966	ug/L	2.250	1	20	1397075	0
[	Sb	121	207.685	ug/L	6.721	3	25	2075448	3
[	Sb	123	202.785	ug/L	3.005	1	18	1511127	1
[	Ba	135	201.866	ug/L	3.147	1	41	458177	1
[	Ba	137	204.483	ug/L	0.926	0	63	785860	1
[>	Tb	159		ug/L			412432	393948	0
[	Tl	205	202.781	ug/L	1.869	0	46	5836679	1
[	Pb	208	201.689	ug/L	0.758	0	581	7792253	0
[	Bi	209		ug/L			345303	310193	0
[	Th	232	204.171	ug/L	1.313	0	111	9503908	0
[	U	238	202.485	ug/L	3.468	1	37	10332359	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR300
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 10:52:40
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	279375	0
[	Be	9	294.056	ug/L	3.173	1	5	97688	0
	C	13		mg/L			4311	4562	2
	Cl	37		mg/L			2343605	2214875	1
[>	Sc	45		ug/L			257316	249021	0
[	V	51	303.073	ug/L	5.181	1	2373	3509102	2
[	V-1	51	301.639	ug/L	5.744	1	2147	3549096	2
[	Cr	52	295.664	ug/L	3.639	1	7381	3085647	1
[	Cr	53	291.666	ug/L	6.434	2	761	361468	1
[	Mn	55	300.815	ug/L	4.976	1	640	5147006	0
[	Co	59	296.476	ug/L	5.341	1	63	4093576	1
[>	Ge	72		ug/L			363321	342905	1
[	Ni	60	288.590	ug/L	6.905	2	88	835403	1
[	Ni	62	288.971	ug/L	10.475	3	64	125302	2
[	Cu	63	284.636	ug/L	6.650	2	253	1878324	1
[	Cu	65	280.739	ug/L	5.857	2	125	898354	0
[	Zn	66	282.258	ug/L	3.934	1	541	558789	0
[	Zn	67	281.812	ug/L	6.746	2	143	96318	2
[	Zn	68	278.578	ug/L	4.680	1	9922	407198	0
[	As	75	293.443	ug/L	4.321	1	205	586518	0
[	As-1	75	292.947	ug/L	3.900	1	11472	589384	0
[	Se	82	290.971	ug/L	7.995	2	-11	63513	1
[	Se	78	289.205	ug/L	6.026	2	11623	164739	0
[	Mo	98	314.820	ug/L	1.459	0	810	2400505	1
	Y	89		ug/L			346311	325749	0
	Kr	83		ug/L			168	227	4
[>	In	115		ug/L			391639	361819	1
[	Ag	107	307.661	ug/L	1.251	0	31	3805824	1
[	Cd	111	293.372	ug/L	4.124	1	203	892565	0
[	Cd	114	310.476	ug/L	3.258	1	20	2192337	2
[	Sb	121	315.257	ug/L	2.611	0	25	3151695	0
[	Sb	123	318.431	ug/L	2.397	0	18	2373942	0
[	Ba	135	304.133	ug/L	5.077	1	41	690534	0
[	Ba	137	304.347	ug/L	3.323	1	63	1170032	0
[>	Tb	159		ug/L			412432	392042	1
[	Tl	205	301.789	ug/L	3.705	1	46	8643531	0
[	Pb	208	306.858	ug/L	1.393	0	581	11797404	0
[	Bi	209		ug/L			345303	295545	1
[	Th	232	300.893	ug/L	2.314	0	111	13937866	0
[	U	238	302.443	ug/L	3.444	1	37	15358001	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 10:59:17
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	298855	1
[	Be	9	49.914	ug/L	0.451	0	5	17741	0
	C	13		mg/L			4311	3543	1
	Cl	37		mg/L			2343605	2238820	0
[>	Sc	45		ug/L			257316	248546	1
|	V	51	49.466	ug/L	0.646	1	2373	573504	0
|	V-1	51	49.837	ug/L	0.728	1	2147	586929	0
|	Cr	52	49.022	ug/L	0.421	0	7381	516570	0
|	Cr	53	50.170	ug/L	0.675	1	761	62665	0
|	Mn	55	50.214	ug/L	0.849	1	640	858001	0
[	Co	59	50.522	ug/L	1.352	2	63	696206	1
[>	Ge	72		ug/L			363321	351281	0
|	Ni	60	49.801	ug/L	1.270	2	88	147761	1
|	Ni	62	50.434	ug/L	1.207	2	64	22456	1
|	Cu	63	49.345	ug/L	0.537	1	253	333828	0
|	Cu	65	48.977	ug/L	1.008	2	125	160676	2
|	Zn	66	50.323	ug/L	0.688	1	541	102492	0
|	Zn	67	48.737	ug/L	0.214	0	143	17180	1
|	Zn	68	49.823	ug/L	0.807	1	9922	82486	0
|	As	75	50.847	ug/L	0.712	1	205	104281	0
|	As-1	75	50.589	ug/L	0.828	1	11472	113442	0
|	Se	82	52.237	ug/L	0.724	1	-11	11672	0
|	Se	78	51.319	ug/L	1.162	2	11623	39191	0
[	Mo	98	49.595	ug/L	0.533	1	810	388043	0
	Y	89		ug/L			346311	337893	0
	Kr	83		ug/L			168	164	5
[>	In	115		ug/L			391639	377644	0
|	Ag	107	49.984	ug/L	0.432	0	31	645370	0
|	Cd	111	50.703	ug/L	0.686	1	203	161176	0
|	Cd	114	50.129	ug/L	0.938	1	20	369419	1
|	Sb	121	49.631	ug/L	0.537	1	25	517916	1
|	Sb	123	50.438	ug/L	0.549	1	18	392494	0
|	Ba	135	50.497	ug/L	0.551	1	41	119718	1
[	Ba	137	50.962	ug/L	0.100	0	63	204556	0
[>	Tb	159		ug/L			412432	411000	1
|	Tl	205	49.504	ug/L	0.090	0	46	1486588	1
|	Pb	208	50.218	ug/L	0.705	1	581	2024249	0
|	Bi	209		ug/L			345303	339840	0
|	Th	232	51.427	ug/L	1.581	3	111	2496926	1
[	U	238	51.294	ug/L	1.173	2	37	2730266	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 11:05:55
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	290373	1
[	Be	9	0.004	ug/L	0.002	49	5	7	10
	C	13		mg/L			4311	4029	2
	Cl	37		mg/L			2343605	2207019	0
[>	Sc	45		ug/L			257316	246339	1
|	V	51	-0.009	ug/L	0.006	67	2373	2164	2
|	V-1	51	0.017	ug/L	0.008	44	2147	2250	2
|	Cr	52	-0.023	ug/L	0.010	44	7381	6831	0
|	Cr	53	0.058	ug/L	0.012	21	761	799	1
|	Mn	55	-0.006	ug/L	0.002	38	640	515	6
[	Co	59	0.001	ug/L	0.001	66	63	81	15
[>	Ge	72		ug/L			363321	349623	0
|	Ni	60	0.003	ug/L	0.004	152	88	92	13
|	Ni	62	0.006	ug/L	0.017	268	64	64	11
|	Cu	63	0.001	ug/L	0.001	105	253	251	3
|	Cu	65	0.003	ug/L	0.004	137	125	129	9
|	Zn	66	0.011	ug/L	0.007	58	541	543	1
|	Zn	67	0.022	ug/L	0.005	21	143	145	0
|	Zn	68	-0.265	ug/L	0.071	26	9922	9161	1
|	As	75	-0.000	ug/L	0.006	21105	205	198	6
|	As-1	75	0.161	ug/L	0.064	39	11472	11364	0
|	Se	82	0.031	ug/L	0.035	113	-11	-4	173
|	Se	78	0.636	ug/L	0.223	35	11623	11529	0
[	Mo	98	-0.064	ug/L	0.002	3	810	282	7
	Y	89		ug/L			346311	334362	1
	Kr	83		ug/L			168	163	2
[>	In	115		ug/L			391639	373224	1
|	Ag	107	0.020	ug/L	0.005	24	31	290	21
|	Cd	111	0.005	ug/L	0.005	106	203	209	7
|	Cd	114	0.001	ug/L	0.001	123	20	23	21
|	Sb	121	0.040	ug/L	0.007	18	25	432	17
|	Sb	123	0.044	ug/L	0.010	22	18	353	21
|	Ba	135	0.003	ug/L	0.001	48	41	45	6
[	Ba	137	0.007	ug/L	0.003	39	63	86	10
[>	Tb	159		ug/L			412432	403486	1
|	Tl	205	0.011	ug/L	0.002	14	46	356	11
|	Pb	208	0.008	ug/L	0.002	28	581	879	9
|	Bi	209		ug/L			345303	342042	1
|	Th	232	0.072	ug/L	0.012	16	111	3558	15
[	U	238	0.003	ug/L	0.001	28	37	215	23

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS49 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 11:16:23
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	293377 ✓	1
[	Be	9	U -0.005	ug/L	0.011	218	5	4	91
	C	13		mg/L			4311	4591	3
	Cl	37		mg/L			2343605	2188512	0
[>	Sc	45		ug/L			257316	245154 ✓	0
[	V	51	0.013	ug/L	0.009	67	2373	2409	3
[	V-1	51	0.011	ug/L	0.004	41	2147	2170	2
[	Cr	52	0.013	ug/L	0.009	71	7381	7161	0
[	Cr	53	0.006	ug/L	0.013	215	761	733	3
[	Mn	55	0.167	ug/L	0.003	1	640	3421	0
[	Co	59	0.002	ug/L	0.000	14	63	91	4
[>	Ge	72		ug/L			363321	348013 ✓	2
[	Ni	60	U -0.011	ug/L	0.001	8	88	51	2
[	Ni	62	-0.006	ug/L	0.010	161	64	58	9
[	Cu	63	U 0.088	ug/L	0.004	4	253	830	1
[	Cu	65	0.087	ug/L	0.004	4	125	401	1
[	Zn	66	0.617	ug/L	0.017	2	541	1757	2
[	Zn	67	0.607	ug/L	0.081	13	143	347	8
[	Zn	68	0.512	ug/L	0.243	47	9922	10242	2
[	As	75	-0.004	ug/L	0.010	271	205	189	11
[	As-1	75	0.272	ug/L	0.159	58	11472	11527	0
[	Se	82	0.002	ug/L	0.045	2569	-11	-11	91
[	Se	78	1.025	ug/L	0.627	61	11623	11680	0
[	Mo	98	-0.057	ug/L	0.011	18	810	337	22
	Y	89		ug/L			346311	337391	1
	Kr	83		ug/L			168	161	5
[>	In	115		ug/L			391639	373962 ✓	1
[	Ag	107	0.010	ug/L	0.000	2	31	160	1
[	Cd	111	-0.001	ug/L	0.006	481	203	190	8
[	Cd	114	0.003	ug/L	0.001	31	20	43	16
[	Sb	121	0.014	ug/L	0.000	3	25	169	2
[	Sb	123	0.014	ug/L	0.001	7	18	129	4
[	Ba	135	0.003	ug/L	0.005	161	41	46	23
[	Ba	137	-0.001	ug/L	0.004	355	63	56	28
[>	Tb	159		ug/L			412432	411893 ✓	1
[	Tl	205	0.006	ug/L	0.001	20	46	231	14
[	Pb	208	0.002	ug/L	0.001	55	581	651	7
[	Bi	209		ug/L			345303	345141	2
[	Th	232	0.050	ug/L	0.004	7	111	2547	6
[	U	238	0.003	ug/L	0.001	23	37	216	19

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT32 BDUP REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, December 06, 2012 11:22:41
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			292757	297739 ✓	1
	Be	9	0.002	ug/L	0.007	352	5	6	39
	C	13		mg/L			4311	3961	2
	Cl	37		mg/L			2343605	2169963	0
>	Sc	45		ug/L			257316	247515 ✓	1
	V	51	-0.019	ug/L	0.008	40	2373	2062	5
	V-1	51	0.005	ug/L	0.007	156	2147	2121	4
	Cr	52	-0.029	ug/L	0.010	32	7381	6795	2
	Cr	53	0.044	ug/L	0.029	64	761	786	3
	Mn	55	0.381	ug/L	0.006	1	640	7095	1
	Co	59	0.006	ug/L	0.001	19	63	146	11
>	Ge	72		ug/L			363321	353763 ✓	0
	Ni	60	0.055	ug/L	0.005	9	88	250	6
	Ni	62	0.056	ug/L	0.010	18	64	87	5
	Cu	63	173.025	ug/L	1.747	1	253	1178266	0
	Cu	65	170.321	ug/L	3.776	2	125	562419	2
	Zn	66	36.047	ug/L	0.555	1	541	74091	1
	Zn	67	31.462	ug/L	0.211	0	143	11218	0
	Zn	68	34.588	ug/L	0.571	1	9922	60626	1
	As	75	0.022	ug/L	0.009	41	205	245	7
	As-1	75	0.002	ug/L	0.039	2026	11472	11174	0
	Se	82	0.074	ug/L	0.036	48	-11	5	159
	Se	78	-0.003	ug/L	0.126	4785	11623	11315	0
	Mo	98	-0.083	ug/L	0.003	3	810	137	14
	Y	89		ug/L			346311	342065	1
	Kr	83		ug/L			168	162	3
>	In	115		ug/L			391639	376928 ✓	0
	Ag	107	0.011	ug/L	0.001	8	31	173	6
	Cd	111	0.002	ug/L	0.004	217	203	200	5
	Cd	114	0.006	ug/L	0.002	30	20	62	20
	Sb	121	0.018	ug/L	0.001	5	25	207	5
	Sb	123	0.016	ug/L	0.001	7	18	140	6
	Ba	135	0.989	ug/L	0.014	1	41	2378	1
	Ba	137	1.011	ug/L	0.012	1	63	4109	0
>	Tb	159		ug/L			412432	411317 ✓	0
	Tl	205	0.007	ug/L	0.001	13	46	252	11
	Pb	208	0.045	ug/L	0.002	4	581	2377	3
	Bi	209		ug/L			345303	350704	1
	Th	232	0.020	ug/L	0.000	2	111	1060	3
	U	238	0.006	ug/L	0.001	12	37	382	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT32 B REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, December 06, 2012 11:28:58
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	290688 ✓	1
[	Be	9	0.002	ug/L	0.007	296	5	6	39
	C	13		mg/L			4311	3954	1
	Cl	37		mg/L			2343605	2155308	0
[>	Sc	45		ug/L			257316	242579 ✓	0
[	V	51	-0.000	ug/L	0.013	3993	2373	2234	7
[	V-1	51	0.002	ug/L	0.004	242	2147	2043	2
[	Cr	52	-0.024	ug/L	0.017	70	7381	6715	3
[	Cr	53	-0.017	ug/L	0.029	172	761	697	4
[	Mn	55	0.379	ug/L	0.007	1	640	6922	1
[	Co	59	0.004	ug/L	0.001	20	63	117	9
[>	Ge	72		ug/L			363321	347571 ✓	1
[	Ni	60	0.062	ug/L	0.006	9	88	265	4
[	Ni	62	0.030	ug/L	0.015	50	64	74	9
[	Cu	63	173.824	ug/L	1.781	1	253	1162860	0
[	Cu	65	172.403	ug/L	2.781	1	125	559233	0
[	Zn	66	37.118	ug/L	0.369	0	541	74940	1
[	Zn	67	31.743	ug/L	0.566	1	143	11119	2
[	Zn	68	35.328	ug/L	0.089	0	9922	60636	1
[	As	75	-0.002	ug/L	0.004	181	205	192	5
[	As-1	75	0.098	ug/L	0.101	103	11472	11168	0
[	Se	82	0.000	ug/L	0.041	8648	-11	-11	79
[	Se	78	0.385	ug/L	0.398	103	11623	11324	0
[	Mo	98	-0.083	ug/L	0.002	2	810	137	12
	Y	89		ug/L			346311	333112	0
	Kr	83		ug/L			168	163	6
[>	In	115		ug/L			391639	373845 ✓	0
[	Ag	107	0.008	ug/L	0.001	12	31	137	9
[	Cd	111	0.004	ug/L	0.002	57	203	205	3
[	Cd	114	0.002	ug/L	0.001	29	20	35	12
[	Sb	121	0.016	ug/L	0.001	5	25	192	4
[	Sb	123	0.018	ug/L	0.000	1	18	155	1
[	Ba	135	0.996	ug/L	0.046	4	41	2376	4
[	Ba	137	1.024	ug/L	0.014	1	63	4128	0
[>	Tb	159		ug/L			412432	413450 ✓	2
[	Tl	205	0.004	ug/L	0.000	8	46	160	8
[	Pb	208	0.042	ug/L	0.001	3	581	2285	0
[	Bi	209		ug/L			345303	345936	1
[	Th	232	0.014	ug/L	0.000	0	111	786	2
[	U	238	0.003	ug/L	0.000	11	37	188	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT32 BSPK REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, December 06, 2012 11:35:15
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	293228 ✓	1
[	Be	9	2.665	ug/L	0.084	3	5	934	1
	C	13		mg/L			4311	3824	0
	Cl	37		mg/L			2343605	2099408	4
[>	Sc	45		ug/L			257316	244422 ✓	1
[	V	51	2.526	ug/L	0.001	0	2373	30943	1
[	V-1	51	2.516	ug/L	0.035	1	2147	31080	2
[	Cr	52	2.569	ug/L	0.035	1	7381	33264	1
[	Cr	53	2.536	ug/L	0.075	2	761	3802	3
[	Mn	55	2.987	ug/L	0.004	0	640	50770	1
[	Co	59	2.596	ug/L	0.035	1	63	35240	2
[>	Ge	72		ug/L			363321	351432 ✓	1
[	Ni	60	2.657	ug/L	0.098	3	88	7966	2
[	Ni	62	2.542	ug/L	0.105	4	64	1191	2
[	Cu	63	174.123	ug/L	6.103	3	253	1177664	2
[	Cu	65	175.443	ug/L	1.430	0	125	575480	0
[	Zn	66	44.308	ug/L	0.347	0	541	90354	1
[	Zn	67	39.013	ug/L	0.441	1	143	13786	1
[	Zn	68	42.210	ug/L	0.806	1	9922	71382	1
[	As	75	2.684	ug/L	0.061	2	205	5696	3
[	As-1	75	2.658	ug/L	0.024	0	11472	16477	0
[	Se	82	8.688	ug/L	0.191	2	-11	1932	1
[	Se	78	8.839	ug/L	0.502	5	11623	16058	0
[	Mo	98	-0.084	ug/L	0.002	2	810	126	14
	Y	89		ug/L			346311	340263 ✓	1
	Kr	83		ug/L			168	160	6
[>	In	115		ug/L			391639	377733	0
[	Ag	107	2.343	ug/L	0.049	2	31	30280	2
[	Cd	111	2.556	ug/L	0.028	1	203	8313	1
[	Cd	114	2.506	ug/L	0.052	2	20	18489	1
[	Sb	121	0.009	ug/L	0.001	8	25	122	6
[	Sb	123	0.011	ug/L	0.003	27	18	101	21
[	Ba	135	3.588	ug/L	0.137	3	41	8543	2
[	Ba	137	3.612	ug/L	0.104	2	63	14554	1
[>	Tb	159		ug/L			412432	411163 ✓	0
[	Tl	205	2.582	ug/L	0.027	1	46	77623	1
[	Pb	208	2.664	ug/L	0.026	0	581	107972	1
[	Bi	209		ug/L			345303	347445	2
[	Th	232	2.488	ug/L	0.039	1	111	121004	1
[	U	238	2.426	ug/L	0.030	1	37	129234	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 IDUP REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 11:41:34
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			292757	292567 ✓	1
	Be	9	-0.002	ug/L	0.009	380	5	5	66
	C	13		mg/L			4311	4808	1
	Cl	37		mg/L			2343605	2221995	0
>	Sc	45		ug/L			257316	246063 ✓	0
	V	51	0.021	ug/L	0.003	12	2373	2505	1
	V-1	51	0.020	ug/L	0.006	28	2147	2284	2
	Cr	52	0.033	ug/L	0.003	8	7381	7403	0
	Cr	53	0.031	ug/L	0.024	79	761	765	3
	Mn	55	148.522	ug/L	3.834	2	640	2511442	2
	Co	59	0.119	ug/L	0.003	2	63	1678	2
>	Ge	72		ug/L			363321	349435 ✓	0
	Ni	60	1.360	ug/L	0.014	1	88	4097	0
	Ni	62	1.176	ug/L	0.070	5	64	581	5
	Cu	63	1.074	ug/L	0.015	1	253	7465	1
	Cu	65	0.986	ug/L	0.038	3	125	3334	3
	Zn	66	14.900	ug/L	0.123	0	541	30555	0
	Zn	67	13.586	ug/L	0.237	1	143	4863	1
	Zn	68	14.458	ug/L	0.339	2	9922	30585	1
	As	75	0.157	ug/L	0.012	7	205	518	4
	As-1	75	0.134	ug/L	0.031	23	11472	11302	0
	Se	82	0.215	ug/L	0.145	67	-11	36	88
	Se	78	0.146	ug/L	0.158	108	11623	11258	0
	Mo	98	7.295	ug/L	0.089	1	810	57446	1
	Y	89		ug/L			346311	339509	0
	Kr	83		ug/L			168	165	10
>	In	115		ug/L			391639	373544 ✓	1
	Ag	107	0.007	ug/L	0.001	15	31	122	12
	Cd	111	0.077	ug/L	0.004	4	203	434	1
	Cd	114	0.099	ug/L	0.007	6	20	737	5
	Sb	121	0.781	ug/L	0.018	2	25	8081	1
	Sb	123	0.799	ug/L	0.010	1	18	6166	2
	Ba	135	14.206	ug/L	0.142	1	41	33343	1
	Ba	137	14.237	ug/L	0.158	1	63	56564	0
>	Tb	159		ug/L			412432	411713 ✓	2
	Tl	205	0.006	ug/L	0.001	20	46	212	13
	Pb	208	0.034	ug/L	0.001	1	581	1944	3
	Bi	209		ug/L			345303	337783	1
	Th	232	0.041	ug/L	0.004	9	111	2089	6
	U	238	0.016	ug/L	0.001	4	37	873	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 I REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 11:47:52
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	303277 ✓	1
[	Be	9	0.004	ug/L	0.016	389	5	7	76
	C	13		mg/L			4311	4871	2
	Cl	37		mg/L			2343605	2243398	1
[>	Sc	45		ug/L			257316	254067 ✓	1
[	V	51	0.023	ug/L	0.012	52	2373	2617	5
[	V-1	51	0.019	ug/L	0.004	19	2147	2342	2
[	Cr	52	0.079	ug/L	0.012	15	7381	8128	2
[	Cr	53	0.062	ug/L	0.035	57	761	830	5
[	Mn	55	150.900	ug/L	0.238	0	640	2634732	1
[	Co	59	0.120	ug/L	0.002	1	63	1747	2
[>	Ge	72		ug/L			363321	353643 ✓	0
[	Ni	60	1.409	ug/L	0.026	1	88	4293	2
[	Ni	62	1.199	ug/L	0.067	5	64	598	4
[	Cu	63	1.523	ug/L	0.021	1	253	10614	1
[	Cu	65	1.456	ug/L	0.009	0	125	4928	0
[	Zn	66	15.036	ug/L	0.045	0	541	31201	0
[	Zn	67	13.627	ug/L	0.217	1	143	4936	0
[	Zn	68	14.710	ug/L	0.381	2	9922	31325	1
[	As	75	0.161	ug/L	0.022	13	205	532	8
[	As-1	75	0.045	ug/L	0.093	205	11472	11258	1
[	Se	82	0.294	ug/L	0.055	18	-11	54	23
[	Se	78	-0.169	ug/L	0.388	230	11623	11220	1
[	Mo	98	7.561	ug/L	0.019	0	810	60228	0
	Y	89		ug/L			346311	346910	1
	Kr	83		ug/L			168	155	3
[>	In	115		ug/L			391639	376680 ✓	1
[	Ag	107	0.005	ug/L	0.000	3	31	95	3
[	Cd	111	0.091	ug/L	0.008	8	203	482	3
[	Cd	114	0.103	ug/L	0.004	3	20	776	4
[	Sb	121	0.807	ug/L	0.025	3	25	8420	1
[	Sb	123	0.816	ug/L	0.031	3	18	6346	2
[	Ba	135	14.662	ug/L	0.075	0	41	34698	1
[	Ba	137	14.872	ug/L	0.206	1	63	59581	1
[>	Tb	159		ug/L			412432	418850 ✓	0
[	Tl	205	0.005	ug/L	0.001	21	46	188	15
[	Pb	208	0.033	ug/L	0.001	3	581	1965	1
[	Bi	209		ug/L			345303	351351	0
[	Th	232	0.026	ug/L	0.001	4	111	1396	5
[	U	238	0.017	ug/L	0.000	0	37	964	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 ISPK REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 11:54:11
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	300816 ✓	2
[	Be	9	10.540	ug/L	0.118	1	5	3775	1
	C	13		mg/L			4311	4765	2
	Cl	37		mg/L			2343605	2223784	2
[>	Sc	45		ug/L			257316	246014 ✓	2
[	V	51	10.340	ug/L	0.044	0	2373	120464	2
[	V-1	51	10.339	ug/L	0.037	0	2147	122159	2
[	Cr	52	10.189	ug/L	0.156	1	7381	111848	1
[	Cr	53	10.194	ug/L	0.298	2	761	13180	2
[	Mn	55	167.528	ug/L	3.608	2	640	2831571	1
[	Co	59	10.226	ug/L	0.065	0	63	139572	2
[>	Ge	72		ug/L			363321	345229 ✓	1
[	Ni	60	11.691	ug/L	0.090	0	88	34156	1
[	Ni	62	11.605	ug/L	0.122	1	64	5126	2
[	Cu	63	11.458	ug/L	0.178	1	253	76359	1
[	Cu	65	11.148	ug/L	0.065	0	125	36031	1
[	Zn	66	48.423	ug/L	0.390	0	541	96957	2
[	Zn	67	44.016	ug/L	1.027	2	143	15266	4
[	Zn	68	46.845	ug/L	0.485	1	9922	76783	1
[	As	75	11.071	ug/L	0.103	0	205	22465	0
[	As-1	75	10.579	ug/L	0.080	0	11472	31935	1
[	Se	82	34.437	ug/L	0.509	1	-11	7558	0
[	Se	78	33.610	ug/L	0.399	1	11623	29036	1
[	Mo	98	17.862	ug/L	0.156	0	810	137865	2
	Y	89		ug/L			346311	337485	1
	Kr	83		ug/L			168	159	9
[>	In	115		ug/L			391639	374210 ✓	0
[	Ag	107	9.070	ug/L	0.107	1	31	116081	1
[	Cd	111	10.106	ug/L	0.054	0	203	31989	0
[	Cd	114	10.105	ug/L	0.130	1	20	73813	2
[	Sb	121	10.808	ug/L	0.015	0	25	111779	0
[	Sb	123	10.859	ug/L	0.057	0	18	83746	0
[	Ba	135	25.372	ug/L	0.601	2	41	59620	2
[	Ba	137	25.573	ug/L	0.124	0	63	101742	1
[>	Tb	159		ug/L			412432	417177 ✓	2
[	Tl	205	10.204	ug/L	0.045	0	46	311036	1
[	Pb	208	10.448	ug/L	0.094	0	581	427972	1
[	Bi	209		ug/L			345303	343590	1
[	Th	232	10.216	ug/L	0.138	1	111	503661	1
[	U	238	10.193	ug/L	0.187	1	37	550883	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS49 MB1SPK REN
Sample Dil Factor: 2
Comments: BA 12/7/12
Sample Date/Time: Thursday, December 06, 2012 12:00:29
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	328696 ✓	0
[	Be	9	23.036	ug/L	0.342	1	5	9009	0
	C	13		mg/L			4311	4809	0
	Cl	37		mg/L			2343605	2184628	0
[>	Sc	45		ug/L			257316	263074 ✓	2
[	V	51	24.011	ug/L	1.215	5	2373	295721	2
[	V-1	51	24.216	ug/L	1.180	4	2147	302822	2
[	Cr	52	24.206	ug/L	0.816	3	7381	273691	1
[	Cr	53	24.820	ug/L	0.832	3	761	33197	1
[	Mn	55	26.253	ug/L	0.817	3	640	474965	1
[	Co	59	24.768	ug/L	0.934	3	63	361183	1
[>	Ge	72		ug/L			363321	356392 ✓	0
[	Ni	60	25.937	ug/L	0.863	3	88	78127	3
[	Ni	62	25.512	ug/L	0.563	2	64	11557	2
[	Cu	63	26.057	ug/L	0.423	1	253	178969	1
[	Cu	65	26.091	ug/L	0.964	3	125	86899	3
[	Zn	66	80.450	ug/L	2.593	3	541	165931	3
[	Zn	67	72.560	ug/L	2.256	3	143	25881	2
[	Zn	68	76.941	ug/L	2.044	2	9922	123948	2
[	As	75	25.935	ug/L	0.836	3	205	54068	3
[	As-1	75	24.794	ug/L	0.739	2	11472	62150	2
[	Se	82	83.257	ug/L	1.474	1	-11	18884	1
[	Se	78	81.452	ug/L	1.303	1	11623	56419	1
[	Mo	98	24.654	ug/L	0.320	1	810	196119	1
	Y	89		ug/L			346311	358179	1
	Kr	83		ug/L			168	159	5
[>	In	115		ug/L			391639	394718 ✓	0
[	Ag	107	24.131	ug/L	0.836	3	31	325609	2
[	Cd	111	24.250	ug/L	0.917	3	203	80665	2
[	Cd	114	24.002	ug/L	0.806	3	20	184861	2
[	Sb	121	23.532	ug/L	0.563	2	25	256648	1
[	Sb	123	23.796	ug/L	0.543	2	18	193528	1
[	Ba	135	25.498	ug/L	0.737	2	41	63194	2
[	Ba	137	25.784	ug/L	0.877	3	63	108183	2
[>	Tb	159		ug/L			412432	448825 ✓	2
[	Tl	205	24.987	ug/L	0.964	3	46	819119	3
[	Pb	208	25.514	ug/L	0.953	3	581	1123162	2
[	Bi	209		ug/L			345303	383886	1
[	Th	232	24.313	ug/L	0.791	3	111	1289049	1
[	U	238	23.921	ug/L	0.971	4	37	1390267	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT53 MBSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 12:06:46
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	316979	0
[	Be	9	27.166	ug/L	0.724	2	5	10244	2
	C	13		mg/L			4311	5177	1
	Cl	37		mg/L			2343605	2189156	0
[>	Sc	45		ug/L			257316	251918	2
[	V	51	27.138	ug/L	0.390	1	2373	319900	1
[	V-1	51	27.233	ug/L	0.423	1	2147	325981	1
[	Cr	52	27.358	ug/L	0.690	2	7381	295281	0
[	Cr	53	27.638	ug/L	0.777	2	761	35311	0
[	Mn	55	28.151	ug/L	0.543	1	640	487731	1
[	Co	59	27.844	ug/L	0.898	3	63	388789	0
[>	Ge	72		ug/L			363321	353396	2
[	Ni	60	28.285	ug/L	0.494	1	88	84454	1
[	Ni	62	28.504	ug/L	0.811	2	64	12791	1
[	Cu	63	30.985	ug/L	0.542	1	253	210952	2
[	Cu	65	30.695	ug/L	0.836	2	125	101313	1
[	Zn	66	89.391	ug/L	2.370	2	541	182683	0
[	Zn	67	79.714	ug/L	2.022	2	143	28170	1
[	Zn	68	86.739	ug/L	3.232	3	9922	137250	1
[	As	75	29.140	ug/L	0.312	1	205	60205	1
[	As-1	75	27.786	ug/L	0.621	2	11472	67700	0
[	Se	82	90.311	ug/L	0.902	0	-11	20310	2
[	Se	78	87.874	ug/L	1.970	2	11623	59447	0
[	Mo	98	-0.057	ug/L	0.004	7	810	343	8
	Y	89		ug/L			346311	349649	2
	Kr	83		ug/L			168	155	9
[>	In	115		ug/L			391639	382169	1
[	Ag	107	28.458	ug/L	0.601	2	31	371771	1
[	Cd	111	26.889	ug/L	0.550	2	203	86575	0
[	Cd	114	27.006	ug/L	0.638	2	20	201368	0
[	Sb	121	0.010	ug/L	0.002	21	25	125	16
[	Sb	123	0.010	ug/L	0.002	16	18	100	13
[	Ba	135	28.820	ug/L	0.390	1	41	69153	1
[	Ba	137	28.734	ug/L	0.422	1	63	116724	0
[>	Tb	159		ug/L			412432	433903	3
[	Tl	205	27.669	ug/L	0.455	1	46	877019	2
[	Pb	208	28.267	ug/L	0.693	2	581	1202748	0
[	Bi	209		ug/L			345303	365986	2
[	Th	232	27.305	ug/L	0.864	3	111	1399146	0
[	U	238	26.454	ug/L	1.090	4	37	1485673	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT65 MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 12:13:05
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

D4

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	330741	5
[	Be	9	26.846	ug/L	0.381	1	5	10559	4
	C	13		mg/L			4311	5229	2
	Cl	37		mg/L			2343605	2238602	1
[>	Sc	45		ug/L			257316	268773	6
[	V	51	27.425	ug/L	0.585	2	2373	344696	4
[	V-1	51	27.306	ug/L	0.578	2	2147	348510	4
[	Cr	52	27.505	ug/L	0.409	1	7381	316634	4
[	Cr	53	27.139	ug/L	0.566	2	761	36999	4
[	Mn	55	27.983	ug/L	0.489	1	640	517072	4
[	Co	59	27.681	ug/L	0.679	2	63	412204	4
[>	Ge	72		ug/L			363321	370064	4
[	Ni	60	28.955	ug/L	0.280	0	88	90556	4
[	Ni	62	28.858	ug/L	1.277	4	64	13569	6
[	Cu	63	31.393	ug/L	0.479	1	253	223885	4
[	Cu	65	30.814	ug/L	0.638	2	125	106516	3
[	Zn	66	90.540	ug/L	2.227	2	541	193861	5
[	Zn	67	81.359	ug/L	0.436	0	143	30119	4
[	Zn	68	86.435	ug/L	0.524	0	9922	143339	4
[	As	75	29.457	ug/L	0.571	1	205	63743	4
[	As-1	75	27.950	ug/L	0.499	1	11472	71251	3
[	Se	82	91.365	ug/L	1.213	1	-11	21518	4
[	Se	78	88.387	ug/L	1.478	1	11623	62545	3
[	Mo	98	-0.067	ug/L	0.002	3	810	272	10
	Y	89		ug/L			346311	366766	3
	Kr	83		ug/L			168	162	4
[>	In	115		ug/L			391639	406160	3
[	Ag	107	28.552	ug/L	0.384	1	31	396637	5
[	Cd	111	26.803	ug/L	0.244	0	203	91761	4
[	Cd	114	26.896	ug/L	0.660	2	20	213325	6
[	Sb	121	0.006	ug/L	0.001	16	25	92	11
[	Sb	123	0.006	ug/L	0.000	8	18	67	5
[	Ba	135	28.578	ug/L	0.223	0	41	72900	4
[	Ba	137	28.908	ug/L	0.397	1	63	124841	4
[>	Tb	159		ug/L			412432	450830	3
[	Tl	205	28.190	ug/L	0.459	1	46	928903	5
[	Pb	208	28.622	ug/L	0.236	0	581	1266219	4
[	Bi	209		ug/L			345303	384828	5
[	Th	232	27.268	ug/L	0.365	1	111	1453165	4
[	U	238	27.053	ug/L	0.744	2	37	1580488	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 12:19:23
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	309194 ✓	1
[	Be	9	49.898	ug/L	0.790	1	5	18354	2
	C	13		mg/L			4311	3549	2
	Cl	37		mg/L			2343605	2142280	0
[>	Sc	45		ug/L			257316	255859 ✓	1
|	V	51	48.024	ug/L	0.372	0	2373	573239	0
|	V-1	51	48.532	ug/L	0.339	0	2147	588451	1
|	Cr	52	47.728	ug/L	0.694	1	7381	517881	0
|	Cr	53	49.286	ug/L	0.477	0	761	63385	0
|	Mn	55	49.166	ug/L	0.599	1	640	864841	1
[	Co	59	49.567	ug/L	1.291	2	63	703096	1
[>	Ge	72		ug/L			363321	352906 ✓	1
|	Ni	60	49.768	ug/L	1.259	2	88	148319	0
|	Ni	62	49.813	ug/L	1.704	3	64	22276	1
|	Cu	63	49.825	ug/L	0.874	1	253	338575	0
|	Cu	65	48.798	ug/L	1.287	2	125	160784	1
|	Zn	66	49.923	ug/L	0.273	0	541	102153	1
|	Zn	67	48.745	ug/L	0.299	0	143	17261	1
|	Zn	68	48.946	ug/L	1.241	2	9922	81561	0
|	As	75	50.096	ug/L	0.661	1	205	103210	0
|	As-1	75	49.901	ug/L	0.841	1	11472	112560	0
|	Se	82	53.697	ug/L	1.426	2	-11	12051	0
|	Se	78	53.104	ug/L	2.072	3	11623	40339	1
[	Mo	98	50.759	ug/L	1.152	2	810	398882	0
	Y	89		ug/L			346311	350025	0
	Kr	83		ug/L			168	163	3
[>	In	115		ug/L			391639	384702 ✓	0
|	Ag	107	49.882	ug/L	0.338	0	31	656100	1
|	Cd	111	49.861	ug/L	0.455	0	203	161473	1
|	Cd	114	50.224	ug/L	0.058	0	20	377060	0
|	Sb	121	48.903	ug/L	0.432	0	25	519842	0
|	Sb	123	49.116	ug/L	0.531	1	18	389333	0
|	Ba	135	51.048	ug/L	0.494	0	41	123291	1
[	Ba	137	51.531	ug/L	0.046	0	63	210702	0
[>	Tb	159		ug/L			412432	434918 ✓	0
|	Tl	205	49.590	ug/L	1.134	2	46	1575617	1
|	Pb	208	50.341	ug/L	0.573	1	581	2147566	0
|	Bi	209		ug/L			345303	366107	0
|	Th	232	51.765	ug/L	0.710	1	111	2660134	0
[	U	238	52.160	ug/L	0.855	1	37	2938515	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 12:26:01
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	292151 ✓	0
[	Be	9	0.004	ug/L	0.007	203	5	7	36
	C	13		mg/L			4311	3836	1
	Cl	37		mg/L			2343605	2172412	0
[>	Sc	45		ug/L			257316	238520 ✓	0
[	V	51	-0.002	ug/L	0.016	807	2373	2178	8
[	V-1	51	-0.027	ug/L	0.002	6	2147	1681	1
[	Cr	52	-0.018	ug/L	0.012	67	7381	6661	1
[	Cr	53	-0.095	ug/L	0.039	41	761	593	7
[	Mn	55	-0.007	ug/L	0.002	21	640	479	5
[	Co	59	-0.000	ug/L	0.001	311	63	56	12
[>	Ge	72		ug/L			363321	338073 ✓	1
[	Ni	60	0.000	ug/L	0.001	713	88	82	1
[	Ni	62	0.003	ug/L	0.034	1172	64	60	22
[	Cu	63	-0.002	ug/L	0.001	44	253	225	3
[	Cu	65	-0.000	ug/L	0.002	6708	125	116	5
[	Zn	66	-0.006	ug/L	0.013	223	541	493	6
[	Zn	67	-0.047	ug/L	0.023	47	143	117	7
[	Zn	68	-0.321	ug/L	0.067	20	9922	8780	1
[	As	75	-0.013	ug/L	0.028	216	205	165	31
[	As-1	75	0.149	ug/L	0.105	70	11472	10964	0
[	Se	82	0.025	ug/L	0.073	292	-11	-5	267
[	Se	78	0.602	ug/L	0.356	59	11623	11129	0
[	Mo	98	-0.086	ug/L	0.003	3	810	107	23
	Y	89		ug/L			346311	326577	1
	Kr	83		ug/L			168	151	4
[>	In	115		ug/L			391639	362259 ✓	1
[	Ag	107	0.011	ug/L	0.003	27	31	164	24
[	Cd	111	0.001	ug/L	0.005	324	203	192	6
[	Cd	114	-0.000	ug/L	0.000	19	20	17	3
[	Sb	121	0.023	ug/L	0.008	34	25	250	32
[	Sb	123	0.021	ug/L	0.008	40	18	173	37
[	Ba	135	0.004	ug/L	0.002	49	41	47	9
[	Ba	137	0.005	ug/L	0.002	37	63	78	10
[>	Tb	159		ug/L			412432	400457 ✓	0
[	Tl	205	0.006	ug/L	0.001	16	46	226	13
[	Pb	208	0.006	ug/L	0.001	17	581	805	5
[	Bi	209		ug/L			345303	341613	0
[	Th	232	0.047	ug/L	0.010	21	111	2316	21
[	U	238	0.002	ug/L	0.001	30	37	164	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 A REN
Sample Dil Factor: ~~5~~ 20 BA 12/6/12
Comments:
Sample Date/Time: Thursday, December 06, 2012 12:31:49
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

DJ

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	291570 ✓	2
[	Be	9	0.004	ug/L	0.002	48	5	7	10
	C	13		mg/L			4311	3729	1
	Cl	37		mg/L			2343605	2159755	0
[>	Sc	45		ug/L			257316	238868 ✓	0
[	V	51	1.682	ug/L	0.022	1	2373	20875	0
[	V-1	51	1.771	ug/L	0.030	1	2147	21969	1
[	Cr	52	3.654	ug/L	0.069	1	7381	43345	1
[	Cr	53	3.827	ug/L	0.125	3	761	5247	2
[	Mn	55	78.630	ug/L	0.456	0	640	1291046	0
[	Co	59	0.554	ug/L	0.008	1	63	7396	1
[>	Ge	72		ug/L			363321	337307 ✓	1
[	Ni	60	2.766	ug/L	0.109	3	88	7955	2
[	Ni	62	2.950	ug/L	0.164	5	64	1317	5
[	Cu	63	13.530	ug/L	0.167	1	253	88062	1
[	Cu	65	13.250	ug/L	0.256	1	125	41818	1
[	Zn	66	198.410	ug/L	2.122	1	541	386552	0
[	Zn	67	173.000	ug/L	0.635	0	143	58218	1
[	Zn	68	191.061	ug/L	2.246	1	9922	277619	0
[	As	75	0.577	ug/L	0.029	5	205	1325	3
[	As-1	75	0.658	ug/L	0.144	21	11472	11927	1
[	Se	82	0.171	ug/L	0.050	29	-11	25	41
[	Se	78	0.440	ug/L	0.458	104	11623	11019	1
[	Mo	98	2.484	ug/L	0.047	1	810	19376	0
	Y	89		ug/L			346311	334652	1
	Kr	83		ug/L			168	153	6
[>	In	115		ug/L			391639	362975 ✓	0
[	Ag	107	0.059	ug/L	0.003	5	31	756	5
[	Cd	111	0.565	ug/L	0.021	3	203	1913	2
[	Cd	114	0.528	ug/L	0.005	0	20	3758	1
[	Sb	121	0.683	ug/L	0.011	1	25	6873	1
[	Sb	123	0.691	ug/L	0.003	0	18	5187	0
[	Ba	135	15.546	ug/L	0.043	0	41	35450	1
[	Ba	137	15.707	ug/L	0.211	1	63	60634	0
[>	Tb	159		ug/L			412432	400271 ✓	1
[	Tl	205	0.009	ug/L	0.001	15	46	309	12
[	Pb	208	30.337	ug/L	0.304	1	581	1191270	0
[	Bi	209		ug/L			345303	342758	1
[	Th	232	0.114	ug/L	0.004	3	111	5477	2
[	U	238	0.021	ug/L	0.001	7	37	1118	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 B REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 12:38:06
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

Del

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	294921 ✓	1
[	Be	9	0.012	ug/L	0.010	81	5	10	33
	C	13		mg/L			4311	4174	1
	Cl	37		mg/L			2343605	2108201	4
[>	Sc	45		ug/L			257316	242947 ✓	4
|	V	51	0.162	ug/L	0.005	3	2373	4068	4
|	V-1	51	0.133	ug/L	0.011	8	2147	3550	0
|	Cr	52	0.016	ug/L	0.009	57	7381	7130	3
|	Cr	53	-0.064	ug/L	0.047	73	761	640	5
|	Mn	55	1.525	ug/L	0.075	4	640	26022	0
[	Co	59	0.006	ug/L	0.000	6	63	135	7
[>	Ge	72		ug/L			363321	340467 ✓	0
|	Ni	60	0.018	ug/L	0.007	39	88	133	15
|	Ni	62	0.036	ug/L	0.042	116	64	75	22
|	Cu	63	0.264	ug/L	0.013	4	253	1970	4
|	Cu	65	0.194	ug/L	0.003	1	125	733	1
|	Zn	66	1.253	ug/L	0.013	1	541	2969	1
|	Zn	67	1.139	ug/L	0.065	5	143	520	3
|	Zn	68	0.818	ug/L	0.044	5	9922	10457	1
|	As	75	0.327	ug/L	0.009	2	205	842	2
|	As-1	75	0.452	ug/L	0.040	8	11472	11637	1
|	Se	82	0.021	ug/L	0.016	74	-11	-6	49
|	Se	78	0.484	ug/L	0.183	37	11623	11147	1
[	Mo	98	0.331	ug/L	0.006	1	810	3265	1
	Y	89		ug/L			346311	334506	1
	Kr	83		ug/L			168	160	1
[>	In	115		ug/L			391639	369618 ✓	2
|	Ag	107	0.008	ug/L	0.001	7	31	126	4
|	Cd	111	-0.002	ug/L	0.003	119	203	184	2
|	Cd	114	0.007	ug/L	0.000	7	20	67	7
|	Sb	121	0.025	ug/L	0.002	6	25	282	6
|	Sb	123	0.026	ug/L	0.002	7	18	214	6
|	Ba	135	1.470	ug/L	0.033	2	41	3448	1
[	Ba	137	1.509	ug/L	0.057	3	63	5983	2
[>	Tb	159		ug/L			412432	405845 ✓	2
|	Tl	205	0.004	ug/L	0.000	1	46	157	1
|	Pb	208	0.219	ug/L	0.005	2	581	9275	0
|	Bi	209		ug/L			345303	343428	1
|	Th	232	0.121	ug/L	0.004	3	111	5915	1
[	U	238	0.007	ug/L	0.000	4	37	425	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 D REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 12:44:23
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

Del

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	347604	6
[	Be	9	0.011	ug/L	0.005	44	5	11	11
	C	13		mg/L			4311	4419	2
	Cl	37		mg/L			2343605	2504764	3
[>	Sc	45		ug/L			257316	319518	7
[	V	51	0.264	ug/L	0.015	5	2373	6859	5
[	V-1	51	0.230	ug/L	0.023	9	2147	6113	3
[	Cr	52	0.165	ug/L	0.022	13	7381	11356	5
[	Cr	53	0.065	ug/L	0.046	70	761	1044	0
[	Mn	55	5.849	ug/L	0.344	5	640	128822	1
[	Co	59	0.025	ug/L	0.003	13	63	518	4
[>	Ge	72		ug/L			363321	393660	5
[	Ni	60	0.354	ug/L	0.012	3	88	1273	6
[	Ni	62	2.070	ug/L	0.311	15	64	1094	8
[	Cu	63	2.945	ug/L	0.096	3	253	22575	4
[	Cu	65	0.974	ug/L	0.046	4	125	3707	2
[	Zn	66	0.605	ug/L	0.018	3	541	1961	5
[	Zn	67	0.706	ug/L	0.053	7	143	432	9
[	Zn	68	0.327	ug/L	0.204	62	9922	11275	2
[	As	75	1.241	ug/L	0.042	3	205	3067	2
[	As-1	75	1.271	ug/L	0.276	21	11472	15292	1
[	Se	82	0.224	ug/L	0.022	9	-11	43	12
[	Se	78	0.199	ug/L	0.906	455	11623	12697	1
[	Mo	98	8.003	ug/L	0.271	3	810	70837	2
	Y	89		ug/L			346311	415932	4
	Kr	83		ug/L			168	160	4
[>	In	115		ug/L			391639	430150	5
[	Ag	107	0.005	ug/L	0.000	10	31	101	7
[	Cd	111	-0.190	ug/L	0.017	8	203	-462	10
[	Cd	114	0.020	ug/L	0.002	11	20	186	10
[	Sb	121	0.397	ug/L	0.013	3	25	4746	2
[	Sb	123	0.409	ug/L	0.020	5	18	3638	2
[	Ba	135	8.221	ug/L	0.405	4	41	22202	0
[	Ba	137	8.242	ug/L	0.446	5	63	37671	1
[>	Tb	159		ug/L			412432	480700	2
[	Tl	205	0.002	ug/L	0.000	11	46	128	6
[	Pb	208	0.055	ug/L	0.005	9	581	3287	6
[	Bi	209		ug/L			345303	372257	4
[	Th	232	0.039	ug/L	0.004	11	111	2332	9
[	U	238	0.526	ug/L	0.013	2	37	32806	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 F REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 12:50:40
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

Del

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	393781	7
[	Be	9	-0.006	ug/L	0.003	55	5	5	25
	C	13		mg/L			4311	4740	0
	Cl	37		mg/L			2343605	2924327	1
[>	Sc	45		ug/L			257316	373617	7
|	V	51	0.174	ug/L	0.009	5	2373	6470	8
|	V-1	51	0.163	ug/L	0.006	3	2147	5997	6
|	Cr	52	0.017	ug/L	0.024	144	7381	10962	5
|	Cr	53	-0.008	ug/L	0.038	471	761	1087	1
|	Mn	55	7.817	ug/L	0.159	2	640	201402	6
[	Co	59	0.027	ug/L	0.002	7	63	660	10
[>	Ge	72		ug/L			363321	451557	3
|	Ni	60	0.447	ug/L	0.034	7	88	1814	9
|	Ni	62	2.502	ug/L	0.305	12	64	1511	14
|	Cu	63	2.513	ug/L	0.136	5	253	22178	8
|	Cu	65	0.297	ug/L	0.018	6	125	1407	7
|	Zn	66	0.841	ug/L	0.042	4	541	2865	6
|	Zn	67	0.891	ug/L	0.025	2	143	578	1
|	Zn	68	-0.172	ug/L	0.153	88	9922	12002	1
|	As	75	0.527	ug/L	0.024	4	205	1643	3
|	As-1	75	-0.238	ug/L	0.137	57	11472	13631	0
|	Se	82	0.207	ug/L	0.050	24	-11	44	32
|	Se	78	-2.793	ug/L	0.487	17	11623	12482	0
[	Mo	98	6.516	ug/L	0.145	2	810	66445	5
	Y	89		ug/L			346311	458430	6
	Kr	83		ug/L			168	166	2
[>	In	115		ug/L			391639	487426	6
|	Ag	107	0.005	ug/L	0.001	16	31	114	13
|	Cd	111	-0.284	ug/L	0.057	20	203	-922	32
|	Cd	114	0.018	ug/L	0.000	2	20	194	8
|	Sb	121	0.453	ug/L	0.007	1	25	6126	5
|	Sb	123	0.447	ug/L	0.011	2	18	4507	4
|	Ba	135	7.468	ug/L	0.054	0	41	22897	6
[	Ba	137	7.487	ug/L	0.177	2	63	38831	5
[>	Tb	159		ug/L			412432	505790	5
|	Tl	205	0.002	ug/L	0.000	16	46	117	9
|	Pb	208	0.032	ug/L	0.001	3	581	2284	7
|	Bi	209		ug/L			345303	391617	3
|	Th	232	0.027	ug/L	0.001	5	111	1758	0
[	U	238	0.185	ug/L	0.005	2	37	12130	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 H REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 12:56:56
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

Del

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	423440	2
[	Be	9	0.006	ug/L	0.013	231	5	11	58
	C	13		mg/L			4311	4912	1
	Cl	37		mg/L			2343605	3059877	1
[>	Sc	45		ug/L			257316	403413	4
[	V	51	0.116	ug/L	0.007	6	2373	5896	6
[	V-1	51	0.122	ug/L	0.003	2	2147	5683	4
[	Cr	52	0.042	ug/L	0.020	46	7381	12293	5
[	Cr	53	0.063	ug/L	0.011	17	761	1321	3
[	Mn	55	7.736	ug/L	0.111	1	640	215432	4
[	Co	59	0.022	ug/L	0.001	5	63	594	2
[>	Ge	72		ug/L			363321	478415	2
[	Ni	60	0.357	ug/L	0.029	8	88	1561	9
[	Ni	62	2.622	ug/L	0.205	7	64	1672	9
[	Cu	63	2.614	ug/L	0.063	2	253	24413	4
[	Cu	65	0.753	ug/L	0.022	2	125	3526	2
[	Zn	66	0.767	ug/L	0.016	2	541	2831	4
[	Zn	67	0.778	ug/L	0.086	11	143	559	7
[	Zn	68	-0.573	ug/L	0.220	38	9922	11916	1
[	As	75	0.284	ug/L	0.012	4	205	1061	4
[	As-1	75	-0.694	ug/L	0.105	15	11472	13188	0
[	Se	82	0.189	ug/L	0.026	14	-11	41	21
[	Se	78	-3.599	ug/L	0.382	10	11623	12629	0
[	Mo	98	5.775	ug/L	0.048	0	810	62474	2
	Y	89		ug/L			346311	478091	2
	Kr	83		ug/L			168	173	2
[>	In	115		ug/L			391639	520769	3
[	Ag	107	0.004	ug/L	0.000	9	31	104	9
[	Cd	111	-0.290	ug/L	0.018	6	203	-999	8
[	Cd	114	0.016	ug/L	0.001	5	20	189	8
[	Sb	121	0.456	ug/L	0.001	0	25	6597	3
[	Sb	123	0.464	ug/L	0.010	2	18	5002	2
[	Ba	135	4.499	ug/L	0.024	0	41	14757	3
[	Ba	137	4.490	ug/L	0.044	0	63	24929	3
[>	Tb	159		ug/L			412432	525115	3
[	Tl	205	0.001	ug/L	0.000	22	46	101	11
[	Pb	208	0.021	ug/L	0.001	4	581	1811	3
[	Bi	209		ug/L			345303	419173	2
[	Th	232	0.016	ug/L	0.001	5	111	1125	5
[	U	238	0.078	ug/L	0.001	1	37	5329	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 J REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 13:03:13
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

Dal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	462930	1
[	Be	9	-0.004	ug/L	0.007	185	5	7	53
	C	13		mg/L			4311	5143	1
	Cl	37		mg/L			2343605	2898827	0
[>	Sc	45		ug/L			257316	429406	2
[	V	51	0.155	ug/L	0.012	7	2373	7044	1
[	V-1	51	0.097	ug/L	0.012	12	2147	5551	2
[	Cr	52	-0.023	ug/L	0.018	76	7381	11904	1
[	Cr	53	-0.189	ug/L	0.017	8	761	867	2
[	Mn	55	0.318	ug/L	0.022	6	640	10436	3
[	Co	59	0.002	ug/L	0.001	31	63	150	11
[>	Ge	72		ug/L			363321	524749	0
[	Ni	60	0.039	ug/L	0.001	2	88	298	2
[	Ni	62	0.140	ug/L	0.033	23	64	185	12
[	Cu	63	0.256	ug/L	0.006	2	253	2949	2
[	Cu	65	0.157	ug/L	0.004	2	125	949	2
[	Zn	66	0.773	ug/L	0.022	2	541	3121	1
[	Zn	67	0.604	ug/L	0.042	6	143	523	4
[	Zn	68	-0.994	ug/L	0.034	3	9922	12157	0
[	As	75	0.254	ug/L	0.020	7	205	1075	4
[	As-1	75	-1.096	ug/L	0.054	4	11472	13255	0
[	Se	82	0.081	ug/L	0.049	60	-11	9	166
[	Se	78	-5.175	ug/L	0.176	3	11623	12575	0
[	Mo	98	0.368	ug/L	0.005	1	810	5468	0
	Y	89		ug/L			346311	512317	2
	Kr	83		ug/L			168	163	6
[>	In	115		ug/L			391639	593665	1
[	Ag	107	0.004	ug/L	0.001	13	31	130	7
[	Cd	111	-0.001	ug/L	0.006	583	203	303	9
[	Cd	114	0.002	ug/L	0.001	36	20	55	15
[	Sb	121	0.019	ug/L	0.001	6	25	350	4
[	Sb	123	0.020	ug/L	0.002	7	18	270	8
[	Ba	135	0.190	ug/L	0.003	1	41	770	3
[	Ba	137	0.199	ug/L	0.008	4	63	1353	3
[>	Tb	159		ug/L			412432	581042	1
[	Tl	205	0.001	ug/L	0.000	20	46	126	9
[	Pb	208	0.080	ug/L	0.001	0	581	5404	1
[	Bi	209		ug/L			345303	496585	1
[	Th	232	0.034	ug/L	0.002	4	111	2513	5
[	U	238	0.005	ug/L	0.001	11	37	451	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 K REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 13:09:32
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

Del

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	436379	11
[	Be	9	0.009	ug/L	0.004	44	5	13	5
	C	13		mg/L			4311	5020	2
	Cl	37		mg/L			2343605	3107872	2
[>	Sc	45		ug/L			257316	419631	9
[	V	51	0.246	ug/L	0.013	5	2373	8651	7
[	V-1	51	0.243	ug/L	0.010	4	2147	8303	7
[	Cr	52	0.132	ug/L	0.019	14	7381	14331	6
[	Cr	53	0.129	ug/L	0.021	15	761	1508	6
[	Mn	55	4.391	ug/L	0.049	1	640	127609	8
[	Co	59	0.025	ug/L	0.001	3	63	691	8
[>	Ge	72		ug/L			363321	487117	5
[	Ni	60	0.424	ug/L	0.055	12	88	1868	17
[	Ni	62	2.925	ug/L	0.561	19	64	1899	23
[	Cu	63	3.025	ug/L	0.097	3	253	28730	8
[	Cu	65	1.179	ug/L	0.040	3	125	5533	8
[	Zn	66	0.989	ug/L	0.023	2	541	3504	4
[	Zn	67	1.037	ug/L	0.067	6	143	695	7
[	Zn	68	-0.310	ug/L	0.203	65	9922	12659	1
[	As	75	1.117	ug/L	0.021	1	205	3446	5
[	As-1	75	0.075	ug/L	0.236	316	11472	15567	1
[	Se	82	0.210	ug/L	0.062	29	-11	49	44
[	Se	78	-3.876	ug/L	0.872	22	11623	12632	0
[	Mo	98	7.344	ug/L	0.151	2	810	80649	6
	Y	89		ug/L			346311	494567	6
	Kr	83		ug/L			168	168	6
[>	In	115		ug/L			391639	540870	6
[	Ag	107	0.002	ug/L	0.000	9	31	87	10
[	Cd	111	-0.264	ug/L	0.076	28	203	-916	37
[	Cd	114	0.022	ug/L	0.004	20	20	257	24
[	Sb	121	0.374	ug/L	0.010	2	25	5613	3
[	Sb	123	0.371	ug/L	0.005	1	18	4161	5
[	Ba	135	6.920	ug/L	0.070	1	41	23542	5
[	Ba	137	6.960	ug/L	0.075	1	63	40073	5
[>	Tb	159		ug/L			412432	534787	6
[	Tl	205	0.002	ug/L	0.000	22	46	130	6
[	Pb	208	0.026	ug/L	0.002	6	581	2136	7
[	Bi	209		ug/L			345303	421643	5
[	Th	232	0.019	ug/L	0.001	5	111	1371	3
[	U	238	0.469	ug/L	0.005	1	37	32541	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 L REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 13:15:52
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

D4

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	435081	5
[	Be	9	-0.006	ug/L	0.006	97	5	5	53
	C	13		mg/L			4311	4773	0
	Cl	37		mg/L			2343605	3056614	1
[>	Sc	45		ug/L			257316	418424	4
|	V	51	0.170	ug/L	0.005	2	2373	7160	5
|	V-1	51	0.164	ug/L	0.002	1	2147	6741	4
|	Cr	52	0.043	ug/L	0.017	40	7381	12747	4
|	Cr	53	0.033	ug/L	0.023	71	761	1306	4
|	Mn	55	5.473	ug/L	0.059	1	640	158337	3
[	Co	59	0.025	ug/L	0.001	3	63	681	5
[>	Ge	72		ug/L			363321	467051	1
|	Ni	60	0.520	ug/L	0.027	5	88	2166	6
|	Ni	62	2.909	ug/L	0.325	11	64	1800	11
|	Cu	63	2.634	ug/L	0.054	2	253	24008	3
|	Cu	65	0.303	ug/L	0.005	1	125	1482	1
|	Zn	66	0.686	ug/L	0.027	3	541	2545	4
|	Zn	67	0.721	ug/L	0.040	5	143	519	1
|	Zn	68	-0.264	ug/L	0.140	53	9922	12237	0
|	As	75	0.474	ug/L	0.010	2	205	1554	1
|	As-1	75	-0.218	ug/L	0.144	66	11472	14156	0
|	Se	82	0.192	ug/L	0.059	30	-11	41	44
|	Se	78	-2.574	ug/L	0.510	19	11623	13072	1
[	Mo	98	6.480	ug/L	0.032	0	810	68320	1
	Y	89		ug/L			346311	483857	3
	Kr	83		ug/L			168	161	5
[>	In	115		ug/L			391639	532306	3
|	Ag	107	0.003	ug/L	0.000	12	31	94	4
|	Cd	111	-0.286	ug/L	0.039	13	203	-999	15
|	Cd	114	0.018	ug/L	0.000	2	20	218	2
|	Sb	121	0.417	ug/L	0.011	2	25	6166	0
|	Sb	123	0.420	ug/L	0.002	0	18	4632	2
|	Ba	135	6.153	ug/L	0.046	0	41	20610	3
[	Ba	137	6.154	ug/L	0.085	1	63	34884	1
[>	Tb	159		ug/L			412432	521971	2
|	Tl	205	0.001	ug/L	0.000	26	46	115	15
|	Pb	208	0.023	ug/L	0.001	4	581	1937	0
|	Bi	209		ug/L			345303	415634	2
|	Th	232	0.015	ug/L	0.001	8	111	1071	5
[	U	238	0.185	ug/L	0.002	1	37	12584	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 M REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 13:22:11
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

Del

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	334905 ✓	3
[	Be	9	-0.008	ug/L	0.002	19	5	3	21
	C	13		mg/L			4311	4645	1
	Cl	37		mg/L			2343605	2844711	1
[>	Sc	45		ug/L			257316	332848	3
[	V	51	0.135	ug/L	0.018	13	2373	5146	3
[	V-1	51	0.122	ug/L	0.001	0	2147	4689	3
[	Cr	52	0.073	ug/L	0.022	30	7381	10558	1
[	Cr	53	0.037	ug/L	0.031	85	761	1046	7
[	Mn	55	7.459	ug/L	0.121	1	640	171348	1
[	Co	59	0.021	ug/L	0.001	5	63	476	7
[>	Ge	72		ug/L			363321	398959 ✓	3
[	Ni	60	0.377	ug/L	0.008	2	88	1366	2
[	Ni	62	2.297	ug/L	0.117	5	64	1228	2
[	Cu	63	2.064	ug/L	0.065	3	253	16113	0
[	Cu	65	0.258	ug/L	0.007	2	125	1098	2
[	Zn	66	0.588	ug/L	0.023	3	541	1947	3
[	Zn	67	0.598	ug/L	0.104	17	143	395	12
[	Zn	68	0.678	ug/L	0.217	32	9922	12014	0
[	As	75	0.281	ug/L	0.006	2	205	878	2
[	As-1	75	0.440	ug/L	0.216	49	11472	13599	0
[	Se	82	0.185	ug/L	0.043	23	-11	33	32
[	Se	78	0.684	ug/L	0.791	115	11623	13176	0
[	Mo	98	5.624	ug/L	0.094	1	810	50753	2
	Y	89		ug/L			346311	391091	1
	Kr	83		ug/L			168	163	4
[>	In	115		ug/L			391639	446596 ✓	2
[	Ag	107	0.002	ug/L	0.000	20	31	72	12
[	Cd	111	-0.161	ug/L	0.023	14	203	-371	21
[	Cd	114	0.013	ug/L	0.001	8	20	132	4
[	Sb	121	0.453	ug/L	0.010	2	25	5616	3
[	Sb	123	0.453	ug/L	0.014	2	18	4191	0
[	Ba	135	4.326	ug/L	0.063	1	41	12168	1
[	Ba	137	4.309	ug/L	0.038	0	63	20517	1
[>	Tb	159		ug/L			412432	432433 ✓	1
[	Tl	205	0.002	ug/L	0.000	15	46	107	8
[	Pb	208	0.015	ug/L	0.001	7	581	1225	5
[	Bi	209		ug/L			345303	350077	2
[	Th	232	0.011	ug/L	0.001	9	111	662	8
[	U	238	0.077	ug/L	0.002	2	37	4369	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 C REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 13:28:30
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

Dd

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	376698	6
[	Be	9	0.001	ug/L	0.011	2219	5	7	71
	C	13		mg/L			4311	5435	2
	Cl	37		mg/L			2343605	2836516	1
[>	Sc	45		ug/L			257316	364792	7
[	V	51	0.363	ug/L	0.012	3	2373	9514	6
[	V-1	51	0.332	ug/L	0.026	7	2147	8745	3
[	Cr	52	0.138	ug/L	0.021	15	7381	12554	7
[	Cr	53	0.055	ug/L	0.065	119	761	1172	1
[	Mn	55	12.270	ug/L	0.267	2	640	308482	8
[	Co	59	0.035	ug/L	0.001	3	63	806	6
[>	Ge	72		ug/L			363321	460586	3
[	Ni	60	0.564	ug/L	0.027	4	88	2305	8
[	Ni	62	0.584	ug/L	0.075	12	64	422	14
[	Cu	63	1.225	ug/L	0.025	2	253	11187	5
[	Cu	65	1.154	ug/L	0.022	1	125	5120	5
[	Zn	66	1.161	ug/L	0.059	5	541	3774	7
[	Zn	67	1.131	ug/L	0.092	8	143	701	9
[	Zn	68	0.169	ug/L	0.140	82	9922	12896	1
[	As	75	0.453	ug/L	0.011	2	205	1476	5
[	As-1	75	-0.326	ug/L	0.092	28	11472	13672	2
[	Se	82	0.047	ug/L	0.068	144	-11	0	2063
[	Se	78	-3.002	ug/L	0.371	12	11623	12584	1
[	Mo	98	0.024	ug/L	0.003	12	810	1270	4
	Y	89		ug/L			346311	429283	6
	Kr	83		ug/L			168	170	6
[>	In	115		ug/L			391639	513010	5
[	Ag	107	0.005	ug/L	0.000	4	31	120	2
[	Cd	111	0.012	ug/L	0.000	1	203	315	5
[	Cd	114	0.002	ug/L	0.000	20	20	43	11
[	Sb	121	0.077	ug/L	0.003	3	25	1123	5
[	Sb	123	0.078	ug/L	0.006	7	18	847	4
[	Ba	135	3.446	ug/L	0.029	0	41	11152	6
[	Ba	137	3.498	ug/L	0.031	0	63	19157	6
[>	Tb	159		ug/L			412432	495541	6
[	Tl	205	0.002	ug/L	0.000	13	46	136	11
[	Pb	208	0.122	ug/L	0.003	2	581	6614	8
[	Bi	209		ug/L			345303	425925	5
[	Th	232	0.008	ug/L	0.001	9	111	612	13
[	U	238	0.009	ug/L	0.000	1	37	604	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 13:34:49
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	423397	1
[	Be	9	48.700	ug/L	0.557	1	5	24527	1
	C	13		mg/L			4311	4027	2
	Cl	37		mg/L			2343605	2899285	0
[>	Sc	45		ug/L			257316	397233	1
[	V	51	49.549	ug/L	0.678	1	2373	918144	1
[	V-1	51	49.781	ug/L	0.733	1	2147	937030	1
[	Cr	52	48.960	ug/L	0.529	1	7381	824547	0
[	Cr	53	49.693	ug/L	0.657	1	761	99213	0
[	Mn	55	49.990	ug/L	0.420	0	640	1365349	1
[	Co	59	49.850	ug/L	0.506	1	63	1098046	0
[>	Ge	72		ug/L			363321	494332	0
[	Ni	60	56.225	ug/L	1.092	1	88	234769	1
[	Ni	62	56.130	ug/L	0.293	0	64	35165	0
[	Cu	63	54.998	ug/L	1.547	2	253	523561	2
[	Cu	65	53.461	ug/L	0.576	1	125	246795	0
[	Zn	66	53.677	ug/L	0.673	1	541	153804	1
[	Zn	67	54.296	ug/L	0.588	1	143	26912	0
[	Zn	68	51.552	ug/L	0.341	0	9922	119647	0
[	As	75	50.036	ug/L	0.309	0	205	144421	0
[	As-1	75	49.040	ug/L	0.199	0	11472	155245	0
[	Se	82	51.702	ug/L	0.992	1	-11	16258	1
[	Se	78	47.877	ug/L	0.120	0	11623	52517	0
[	Mo	98	50.766	ug/L	0.245	0	810	558970	0
	Y	89		ug/L			346311	468092	1
	Kr	83		ug/L			168	172	1
[>	In	115		ug/L			391639	556099	1
[	Ag	107	50.557	ug/L	0.536	1	31	961169	1
[	Cd	111	49.828	ug/L	0.651	1	203	233231	0
[	Cd	114	49.828	ug/L	0.606	1	20	540696	0
[	Sb	121	46.933	ug/L	0.499	1	25	721153	1
[	Sb	123	47.204	ug/L	0.786	1	18	540841	1
[	Ba	135	47.140	ug/L	0.817	1	41	164555	1
[	Ba	137	47.361	ug/L	0.647	1	63	279904	1
[>	Tb	159		ug/L			412432	539557	1
[	Tl	205	53.144	ug/L	1.953	3	46	2095252	4
[	Pb	208	51.323	ug/L	0.414	0	581	2716170	0
[	Bi	209		ug/L			345303	462704	1
[	Th	232	51.961	ug/L	1.212	2	111	3312362	1
[	U	238	51.991	ug/L	1.201	2	37	3633347	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 13:41:27
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			292757	420436	1
[	Be	9	-0.007	ug/L	0.005	71	5	5	50
	C	13		mg/L			4311	4805	2
	Cl	37		mg/L			2343605	2949697	0
[>	Sc	45		ug/L			257316	393235	0
[	V	51	-0.005	ug/L	0.004	75	2373	3535	2
[	V-1	51	-0.086	ug/L	0.001	0	2147	1680	1
[	Cr	52	-0.029	ug/L	0.005	15	7381	10811	0
[	Cr	53	-0.274	ug/L	0.006	2	761	628	1
[	Mn	55	-0.014	ug/L	0.002	11	640	597	7
[	Co	59	-0.001	ug/L	0.000	47	63	83	7
[>	Ge	72		ug/L			363321	492219	0
[	Ni	60	0.003	ug/L	0.002	71	88	132	7
[	Ni	62	0.115	ug/L	0.028	23	64	158	10
[	Cu	63	0.015	ug/L	0.001	6	253	487	1
[	Cu	65	-0.006	ug/L	0.004	72	125	142	12
[	Zn	66	-0.013	ug/L	0.007	50	541	696	1
[	Zn	67	-0.080	ug/L	0.013	15	143	155	3
[	Zn	68	-1.107	ug/L	0.071	6	9922	11171	0
[	As	75	-0.060	ug/L	0.013	21	205	107	34
[	As-1	75	-0.799	ug/L	0.033	4	11472	13275	0
[	Se	82	0.061	ug/L	0.062	101	-11	3	635
[	Se	78	-2.897	ug/L	0.146	5	11623	13534	0
[	Mo	98	-0.085	ug/L	0.003	3	810	166	20
	Y	89		ug/L			346311	477227	1
	Kr	83		ug/L			168	159	6
[>	In	115		ug/L			391639	553443	0
[	Ag	107	0.010	ug/L	0.002	21	31	227	17
[	Cd	111	0.026	ug/L	0.004	16	203	405	5
[	Cd	114	0.000	ug/L	0.001	566	20	30	21
[	Sb	121	0.023	ug/L	0.004	18	25	383	16
[	Sb	123	0.021	ug/L	0.004	21	18	260	19
[	Ba	135	0.000	ug/L	0.002	730	41	60	13
[	Ba	137	0.000	ug/L	0.002	523	63	92	16
[>	Tb	159		ug/L			412432	533921	0
[	Tl	205	0.005	ug/L	0.001	22	46	274	17
[	Pb	208	0.004	ug/L	0.001	13	581	970	3
[	Bi	209		ug/L			345303	472649	0
[	Th	232	0.047	ug/L	0.008	17	111	3131	16
[	U	238	0.002	ug/L	0.001	34	37	213	26

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 13:47:17
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L				415979	1
[	Be	9		ug/L				3	21
	C	13		mg/L				4786	2
	Cl	37		mg/L				2971886	1
[>	Sc	45		ug/L				393490	0
|	V	51		ug/L				3664	1
|	V-1	51		ug/L				1705	6
|	Cr	52		ug/L				11009	1
|	Cr	53		ug/L				617	4
|	Mn	55		ug/L				588	6
[	Co	59		ug/L				82	25
[>	Ge	72		ug/L				494017	0
|	Ni	60		ug/L				129	13
|	Ni	62		ug/L				138	5
|	Cu	63		ug/L				437	6
|	Cu	65		ug/L				143	3
|	Zn	66		ug/L				699	3
|	Zn	67		ug/L				170	4
|	Zn	68		ug/L				11162	0
|	As	75		ug/L				106	26
|	As-1	75		ug/L				13230	0
|	Se	82		ug/L				-6	252
|	Se	78		ug/L				13487	0
[	Mo	98		ug/L				83	2
	Y	89		ug/L				471707	0
	Kr	83		ug/L				167	4
[>	In	115		ug/L				554281	0
|	Ag	107		ug/L				139	19
|	Cd	111		ug/L				343	3
|	Cd	114		ug/L				30	27
|	Sb	121		ug/L				158	35
|	Sb	123		ug/L				129	21
|	Ba	135		ug/L				55	6
[	Ba	137		ug/L				86	2
[>	Tb	159		ug/L				534474	1
|	Tl	205		ug/L				174	13
|	Pb	208		ug/L				823	10
|	Bi	209		ug/L				470644	1
|	Th	232		ug/L				1226	25
[	U	238		ug/L				165	34

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 13:55:07
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	418648 ✓	1
[	Be	9	49.113	ug/L	0.672	1	3	24449	0
	C	13		mg/L			4786	3966	1
	Cl	37		mg/L			2971886	2948600	0
[>	Sc	45		ug/L			393490	394881 ✓	0
[	V	51	49.187	ug/L	1.366	2	3664	906035	2
[	V-1	51	49.593	ug/L	1.249	2	1705	926352	1
[	Cr	52	49.355	ug/L	1.273	2	11009	825878	1
[	Cr	53	50.582	ug/L	1.012	2	617	99821	1
[	Mn	55	50.134	ug/L	0.850	1	588	1360669	1
[	Co	59	49.943	ug/L	1.112	2	82	1093536	1
[>	Ge	72		ug/L			494017	497529 ✓	0
[	Ni	60	56.227	ug/L	0.771	1	129	236311	1
[	Ni	62	56.187	ug/L	0.341	0	138	35480	0
[	Cu	63	54.793	ug/L	0.310	0	437	525098	0
[	Cu	65	53.458	ug/L	0.167	0	143	248352	0
[	Zn	66	53.552	ug/L	0.495	0	699	154405	0
[	Zn	67	54.210	ug/L	0.208	0	170	27018	0
[	Zn	68	51.583	ug/L	0.340	0	11162	118135	0
[	As	75	49.841	ug/L	0.271	0	106	144617	0
[	As-1	75	49.718	ug/L	0.256	0	13230	155807	0
[	Se	82	51.002	ug/L	0.562	1	-6	16152	0
[	Se	78	50.600	ug/L	0.478	0	13487	52624	0
[	Mo	98	50.792	ug/L	0.298	0	83	561846	0
	Y	89		ug/L			471707	467910	0
	Kr	83		ug/L			167	177	2
[>	In	115		ug/L			554281	554657 ✓	1
[	Ag	107	50.341	ug/L	1.043	2	139	954522	0
[	Cd	111	50.030	ug/L	0.694	1	343	233614	0
[	Cd	114	49.711	ug/L	0.491	0	30	538030	0
[	Sb	121	47.051	ug/L	0.758	1	158	721130	0
[	Sb	123	47.072	ug/L	0.564	1	129	538039	0
[	Ba	135	47.591	ug/L	0.712	1	55	165684	0
[	Ba	137	47.576	ug/L	1.203	2	86	280389	0
[>	Tb	159		ug/L			534474	530910 ✓	0
[	Tl	205	51.154	ug/L	0.256	0	174	1984310	0
[	Pb	208	51.705	ug/L	0.211	0	823	2692698	0
[	Bi	209		ug/L			470644	459643	1
[	Th	232	51.903	ug/L	0.637	1	1226	3257059	0
[	U	238	52.243	ug/L	0.299	0	165	3593054	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 14:01:46
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	428968 ✓	1
[	Be	9	-0.001	ug/L	0.001	142	3	2	24
	C	13		mg/L			4786	4678	0
	Cl	37		mg/L			2971886	2984952	0
[>	Sc	45		ug/L			393490	400672 ✓	1
[	V	51	-0.006	ug/L	0.008	124	3664	3612	4
[	V-1	51	0.002	ug/L	0.002	155	1705	1766	3
[	Cr	52	-0.019	ug/L	0.007	38	11009	10896	0
[	Cr	53	0.006	ug/L	0.018	286	617	640	4
[	Mn	55	0.002	ug/L	0.001	63	588	645	5
[	Co	59	0.002	ug/L	0.001	69	82	117	20
[>	Ge	72		ug/L			494017	498579 ✓	0
[	Ni	60	0.001	ug/L	0.001	248	129	133	5
[	Ni	62	0.008	ug/L	0.042	528	138	145	18
[	Cu	63	0.002	ug/L	0.006	254	437	463	11
[	Cu	65	0.003	ug/L	0.002	63	143	160	6
[	Zn	66	0.003	ug/L	0.009	271	699	715	3
[	Zn	67	0.007	ug/L	0.029	435	170	175	9
[	Zn	68	0.018	ug/L	0.050	273	11162	11303	1
[	As	75	-0.010	ug/L	0.006	60	106	79	20
[	As-1	75	0.005	ug/L	0.038	748	13230	13366	0
[	Se	82	0.012	ug/L	0.013	101	-6	-2	167
[	Se	78	0.057	ug/L	0.131	227	13487	13655	0
[	Mo	98	0.008	ug/L	0.001	14	83	174	8
	Y	89		ug/L			471707	480841	1
	Kr	83		ug/L			167	166	0
[>	In	115		ug/L			554281	561739 ✓	0
[	Ag	107	0.003	ug/L	0.001	29	139	199	7
[	Cd	111	0.013	ug/L	0.007	57	343	408	8
[	Cd	114	0.001	ug/L	0.001	76	30	45	23
[	Sb	121	0.014	ug/L	0.005	39	158	372	23
[	Sb	123	0.012	ug/L	0.003	27	129	266	14
[	Ba	135	0.003	ug/L	0.001	30	55	66	3
[	Ba	137	0.002	ug/L	0.001	57	86	98	5
[>	Tb	159		ug/L			534474	539743 ✓	1
[	Tl	205	0.004	ug/L	0.001	23	174	322	10
[	Pb	208	0.003	ug/L	0.002	78	823	966	9
[	Bi	209		ug/L			470644	477005	2
[	Th	232	0.021	ug/L	0.004	18	1226	2586	10
[	U	238	0.002	ug/L	0.001	76	165	274	29

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 D REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 14:08:36
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	422239 ✓	0
[	Be	9	0.004	ug/L	0.004	94	3	5	35
	C	13		mg/L			4786	5285	3
	Cl	37		mg/L			2971886	2943821	0
[>	Sc	45		ug/L			393490	409130 ✓	0
[	V	51	0.242	ug/L	0.014	5	3664	8419	3
[	V-1	51	0.256	ug/L	0.012	4	1705	6726	4
[	Cr	52	U 0.117	ug/L	0.015	12	11009	13450	2
[	Cr	53	0.165	ug/L	0.008	4	617	978	2
[	Mn	55	8.414	ug/L	0.055	0	588	237135	0
[	Co	59	0.022	ug/L	0.001	4	82	575	4
[>	Ge	72		ug/L			494017	489897 ✓	0
[	Ni	60	0.416	ug/L	0.008	1	129	1851	2
[	Ni	62	0.325	ug/L	0.019	5	138	338	3
[	Cu	63	1.070	ug/L	0.030	2	437	10516	2
[	Cu	65	1.050	ug/L	0.013	1	143	4943	1
[	Zn	66	0.616	ug/L	0.013	2	699	2433	2
[	Zn	67	0.596	ug/L	0.046	7	170	459	5
[	Zn	68	0.700	ug/L	0.096	13	11162	12497	1
[	As	75	0.388	ug/L	0.001	0	106	1214	0
[	As-1	75	0.447	ug/L	0.047	10	13230	14381	0
[	Se	82	0.095	ug/L	0.027	28	-6	23	35
[	Se	78	0.292	ug/L	0.196	67	13487	13596	0
[	Mo	98	0.118	ug/L	0.003	2	83	1369	1
	Y	89		ug/L			471707	476405	1
	Kr	83		ug/L			167	164	2
[>	In	115		ug/L			554281	558156 ✓	1
[	Ag	107	-0.000	ug/L	0.001	1515	139	139	12
[	Cd	111	0.009	ug/L	0.006	66	343	386	6
[	Cd	114	-0.000	ug/L	0.001	420	30	29	29
[	Sb	121	0.051	ug/L	0.001	2	158	939	0
[	Sb	123	0.046	ug/L	0.002	4	129	656	3
[	Ba	135	2.444	ug/L	0.048	1	55	8618	2
[	Ba	137	2.448	ug/L	0.045	1	86	14602	1
[>	Tb	159		ug/L			534474	538435 ✓	0
[	Tl	205	0.001	ug/L	0.001	96	174	229	22
[	Pb	208	0.038	ug/L	0.002	4	823	2855	3
[	Bi	209		ug/L			470644	468500	1
[	Th	232	0.011	ug/L	0.004	36	1226	1914	12
[	U	238	0.005	ug/L	0.001	13	165	539	8

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 F REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 14:14:55
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	433914 ✓	0
[	Be	9	0.004	ug/L	0.006	147	3	5	53
	C	13		mg/L			4786	5331	1
	Cl	37		mg/L			2971886	2922500	0
[>	Sc	45		ug/L			393490	416869 ✓	1
[	V	51	0.254	ug/L	0.017	6	3664	8806	2
[	V-1	51	0.267	ug/L	0.013	4	1705	7060	1
[	Cr	52	u 0.117	ug/L	0.029	24	11009	13702	1
[	Cr	53	0.162	ug/L	0.029	17	617	990	4
[	Mn	55	1.949	ug/L	0.026	1	588	56450	0
[	Co	59	0.020	ug/L	0.002	8	82	555	5
[>	Ge	72		ug/L			494017	497103 ✓	0
[	Ni	60	0.545	ug/L	0.008	1	129	2418	1
[	Ni	62	0.435	ug/L	0.042	9	138	413	6
[	Cu	63	0.981	ug/L	0.013	1	437	9822	0
[	Cu	65	0.968	ug/L	0.002	0	143	4636	0
[	Zn	66	0.713	ug/L	0.009	1	699	2747	1
[	Zn	67	0.737	ug/L	0.056	7	170	535	4
[	Zn	68	0.736	ug/L	0.053	7	11162	12756	0
[	As	75	0.415	ug/L	0.018	4	106	1310	4
[	As-1	75	0.363	ug/L	0.033	9	13230	14352	0
[	Se	82	0.070	ug/L	0.055	78	-6	15	109
[	Se	78	-0.150	ug/L	0.149	99	13487	13455	0
[	Mo	98	0.118	ug/L	0.001	0	83	1386	0
	Y	89		ug/L			471707	481705	1
	Kr	83		ug/L			167	164	4
[>	In	115		ug/L			554281	564128 ✓	0
[	Ag	107	-0.002	ug/L	0.000	32	139	112	9
[	Cd	111	0.008	ug/L	0.003	44	343	386	5
[	Cd	114	0.001	ug/L	0.000	42	30	43	12
[	Sb	121	0.062	ug/L	0.003	5	158	1129	4
[	Sb	123	0.066	ug/L	0.001	2	129	898	1
[	Ba	135	3.047	ug/L	0.055	1	55	10844	1
[	Ba	137	3.051	ug/L	0.108	3	86	18372	2
[>	Tb	159		ug/L			534474	550094 ✓	1
[	Tl	205	-0.001	ug/L	0.000	28	174	157	2
[	Pb	208	0.038	ug/L	0.002	4	823	2908	1
[	Bi	209		ug/L			470644	479719	0
[	Th	232	0.000	ug/L	0.001	175	1226	1287	3
[	U	238	0.006	ug/L	0.001	10	165	572	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 G REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 14:21:14
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	421619 ✓	0
[	Be	9	0.005	ug/L	0.006	118	3	5	49
	C	13		mg/L			4786	5382	2
	Cl	37		mg/L			2971886	2876092	0
[>	Sc	45		ug/L			393490	409117 ✓	1
[	V	51	0.265	ug/L	0.013	4	3664	8842	2
[	V-1	51	0.272	ug/L	0.009	3	1705	7017	0
[	Cr	52	U 0.132	ug/L	0.035	26	11009	13696	3
[	Cr	53	0.159	ug/L	0.042	26	617	963	7
[	Mn	55	2.075	ug/L	0.035	1	588	58933	1
[	Co	59	0.019	ug/L	0.002	9	82	508	9
[>	Ge	72		ug/L			494017	495251 ✓	0
[	Ni	60	0.543	ug/L	0.027	4	129	2400	4
[	Ni	62	0.475	ug/L	0.062	12	138	436	8
[	Cu	63	0.984	ug/L	0.027	2	437	9817	2
[	Cu	65	0.942	ug/L	0.006	0	143	4496	0
[	Zn	66	0.605	ug/L	0.024	3	699	2428	2
[	Zn	67	0.653	ug/L	0.034	5	170	492	3
[	Zn	68	0.682	ug/L	0.038	5	11162	12595	0
[	As	75	0.399	ug/L	0.010	2	106	1258	2
[	As-1	75	0.353	ug/L	0.004	1	13230	14269	0
[	Se	82	0.036	ug/L	0.023	65	-6	4	147
[	Se	78	-0.168	ug/L	0.035	20	13487	13392	0
[	Mo	98	0.120	ug/L	0.005	4	83	1408	3
	Y	89		ug/L			471707	486570	1
	Kr	83		ug/L			167	163	4
[>	In	115		ug/L			554281	559636 ✓	1
[	Ag	107	-0.002	ug/L	0.000	5	139	96	3
[	Cd	111	-0.001	ug/L	0.001	83	343	343	0
[	Cd	114	0.000	ug/L	0.001	618	30	32	23
[	Sb	121	0.060	ug/L	0.001	1	158	1090	0
[	Sb	123	0.062	ug/L	0.001	1	129	840	1
[	Ba	135	2.987	ug/L	0.089	2	55	10545	1
[	Ba	137	3.016	ug/L	0.056	1	86	18020	0
[>	Tb	159		ug/L			534474	550287 ✓	0
[	Tl	205	-0.002	ug/L	0.000	23	174	114	13
[	Pb	208	0.037	ug/L	0.002	5	823	2838	4
[	Bi	209		ug/L			470644	478891	1
[	Th	232	-0.005	ug/L	0.001	16	1226	930	6
[	U	238	0.005	ug/L	0.000	4	165	492	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 H REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 14:27:33
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	414407 ✓	2
[	Be	9	0.003	ug/L	0.002	67	3	5	25
	C	13		mg/L			4786	5240	2
	Cl	37		mg/L			2971886	2861111	1
[>	Sc	45		ug/L			393490	398106 ✓	3
|	V	51	0.209	ug/L	0.006	2	3664	7572	2
|	V-1	51	0.208	ug/L	0.003	1	1705	5642	3
|	Cr	52	0.086	ug/L	0.012	13	11009	12572	2
|	Cr	53	0.090	ug/L	0.009	10	617	803	5
|	Mn	55	5.739	ug/L	0.051	0	588	157547	3
[	Co	59	0.015	ug/L	0.001	3	82	420	6
[>	Ge	72		ug/L			494017	481714 ✓	2
|	Ni	60	0.411	ug/L	0.004	1	129	1798	1
|	Ni	62	0.325	ug/L	0.020	6	138	333	3
|	Cu	63	0.574	ug/L	0.014	2	437	5753	4
|	Cu	65	0.563	ug/L	0.007	1	143	2670	3
|	Zn	66	0.746	ug/L	0.033	4	699	2754	4
|	Zn	67	0.768	ug/L	0.056	7	170	533	4
|	Zn	68	0.878	ug/L	0.134	15	11162	12642	1
|	As	75	0.349	ug/L	0.012	3	106	1084	1
|	As-1	75	0.424	ug/L	0.129	30	13230	14071	0
|	Se	82	0.049	ug/L	0.046	93	-6	9	157
|	Se	78	0.318	ug/L	0.443	139	13487	13384	0
[	Mo	98	0.110	ug/L	0.003	2	83	1254	1
	Y	89		ug/L			471707	465468	2
	Kr	83		ug/L			167	165	7
[>	In	115		ug/L			554281	546553 ✓	1
|	Ag	107	-0.002	ug/L	0.001	31	139	93	16
|	Cd	111	0.003	ug/L	0.003	90	343	354	5
|	Cd	114	0.001	ug/L	0.001	149	30	39	33
|	Sb	121	0.039	ug/L	0.001	1	158	751	1
|	Sb	123	0.040	ug/L	0.003	8	129	577	7
|	Ba	135	2.395	ug/L	0.071	2	55	8271	4
[	Ba	137	2.369	ug/L	0.022	0	86	13841	1
[>	Tb	159		ug/L			534474	530688 ✓	2
|	Tl	205	-0.001	ug/L	0.000	16	174	121	7
|	Pb	208	0.028	ug/L	0.001	3	823	2294	2
|	Bi	209		ug/L			470644	461465	2
|	Th	232	-0.008	ug/L	0.000	1	1226	717	3
[	U	238	0.004	ug/L	0.000	5	165	435	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 EDUP REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 14:33:50
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	413313 ✓	1
[	Be	9	0.011	ug/L	0.005	40	3	8	24
	C	13		mg/L			4786	5433	1
	Cl	37		mg/L			2971886	2827268	0
[>	Sc	45		ug/L			393490	396708 ✓	1
[	V	51	0.207	ug/L	0.012	5	3664	7513	1
[	V-1	51	0.216	ug/L	0.007	3	1705	5757	2
[	Cr	52	0.128	ug/L	0.024	18	11009	13221	1
[	Cr	53	0.157	ug/L	0.015	9	617	932	4
[	Mn	55	1.148	ug/L	0.021	1	588	31892	0
[	Co	59	0.021	ug/L	0.001	5	82	545	3
[>	Ge	72		ug/L			494017	480961 ✓	0
[	Ni	60	0.573	ug/L	0.025	4	129	2452	4
[	Ni	62	0.459	ug/L	0.036	7	138	414	5
[	Cu	63	0.929	ug/L	0.034	3	437	9022	3
[	Cu	65	0.920	ug/L	0.003	0	143	4268	0
[	Zn	66	2.896	ug/L	0.026	0	699	8716	0
[	Zn	67	2.777	ug/L	0.091	3	170	1494	2
[	Zn	68	2.917	ug/L	0.059	2	11162	16711	0
[	As	75	0.352	ug/L	0.010	2	106	1089	2
[	As-1	75	0.383	ug/L	0.032	8	13230	13941	0
[	Se	82	0.047	ug/L	0.045	96	-6	8	167
[	Se	78	0.157	ug/L	0.089	56	13487	13247	0
[	Mo	98	0.112	ug/L	0.007	6	83	1273	6
	Y	89		ug/L			471707	466193	0
	Kr	83		ug/L			167	165	6
[>	In	115		ug/L			554281	540133 ✓	0
[	Ag	107	-0.002	ug/L	0.001	34	139	105	10
[	Cd	111	0.007	ug/L	0.004	59	343	365	6
[	Cd	114	0.002	ug/L	0.001	45	30	55	19
[	Sb	121	0.069	ug/L	0.003	4	158	1191	3
[	Sb	123	0.066	ug/L	0.001	1	129	865	0
[	Ba	135	3.062	ug/L	0.112	3	55	10431	2
[	Ba	137	3.042	ug/L	0.109	3	86	17540	2
[>	Tb	159		ug/L			534474	534460 ✓	1
[	Tl	205	-0.001	ug/L	0.000	58	174	150	8
[	Pb	208	0.045	ug/L	0.001	2	823	3196	1
[	Bi	209		ug/L			470644	468949	1
[	Th	232	-0.008	ug/L	0.001	13	1226	750	8
[	U	238	0.005	ug/L	0.000	5	165	513	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 E REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 14:40:06
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	414258 ✓	2
[	Be	9	0.008	ug/L	0.004	49	3	7	28
	C	13		mg/L			4786	5450	2
	Cl	37		mg/L			2971886	2812521	0
[>	Sc	45		ug/L			393490	393515 ✓	1
[	V	51	0.207	ug/L	0.019	9	3664	7442	3
[	V-1	51	0.213	ug/L	0.009	4	1705	5664	1
[	Cr	52	0.126	ug/L	0.038	29	11009	13074	3
[	Cr	53	0.149	ug/L	0.027	18	617	908	4
[	Mn	55	1.131	ug/L	0.020	1	588	31164	2
[	Co	59	0.021	ug/L	0.002	10	82	534	6
[>	Ge	72		ug/L			494017	477693 ✓	1
[	Ni	60	0.555	ug/L	0.018	3	129	2362	2
[	Ni	62	0.442	ug/L	0.037	8	138	401	6
[	Cu	63	0.894	ug/L	0.028	3	437	8642	1
[	Cu	65	0.868	ug/L	0.044	5	143	4008	4
[	Zn	66	2.886	ug/L	0.048	1	699	8628	0
[	Zn	67	2.433	ug/L	0.127	5	170	1321	4
[	Zn	68	2.855	ug/L	0.160	5	11162	16471	0
[	As	75	0.347	ug/L	0.005	1	106	1069	1
[	As-1	75	0.356	ug/L	0.053	14	13230	13772	0
[	Se	82	0.079	ug/L	0.035	44	-6	17	58
[	Se	78	0.102	ug/L	0.202	198	13487	13115	0
[	Mo	98	0.110	ug/L	0.006	5	83	1247	4
	Y	89		ug/L			471707	462381	0
	Kr	83		ug/L			167	162	1
[>	In	115		ug/L			554281	535030 ✓	1
[	Ag	107	-0.002	ug/L	0.001	54	139	94	22
[	Cd	111	-0.001	ug/L	0.004	629	343	328	6
[	Cd	114	0.001	ug/L	0.001	67	30	41	18
[	Sb	121	0.066	ug/L	0.002	3	158	1124	2
[	Sb	123	0.069	ug/L	0.002	3	129	889	1
[	Ba	135	3.032	ug/L	0.030	1	55	10234	0
[	Ba	137	3.049	ug/L	0.043	1	86	17413	1
[>	Tb	159		ug/L			534474	535282 ✓	1
[	Tl	205	-0.002	ug/L	0.000	11	174	110	6
[	Pb	208	0.036	ug/L	0.001	3	823	2705	1
[	Bi	209		ug/L			470644	461148	1
[	Th	232	-0.006	ug/L	0.000	2	1226	860	1
[	U	238	0.005	ug/L	0.000	9	165	492	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 ESPK REN
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, December 06, 2012 14:46:23
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	418632 ✓	1
[	Be	9	10.063	ug/L	0.172	1	3	5012	2
	C	13		mg/L			4786	5165	3
	Cl	37		mg/L			2971886	2866747	0
[>	Sc	45		ug/L			393490	401170 ✓	1
[	V	51	10.235	ug/L	0.223	2	3664	194487	1
[	V-1	51	10.269	ug/L	0.198	1	1705	196240	1
[	Cr	52	10.007	ug/L	0.101	1	11009	179077	0
[	Cr	53	10.122	ug/L	0.126	1	617	20796	0
[	Mn	55	11.229	ug/L	0.134	1	588	310074	1
[	Co	59	10.001	ug/L	0.147	1	82	222532	0
[>	Ge	72		ug/L			494017	491990 ✓	0
[	Ni	60	12.094	ug/L	0.141	1	129	50367	1
[	Ni	62	12.033	ug/L	0.398	3	138	7621	3
[	Cu	63	13.061	ug/L	0.188	1	437	124096	0
[	Cu	65	12.681	ug/L	0.054	0	143	58364	0
[	Zn	66	38.188	ug/L	0.157	0	699	109078	0
[	Zn	67	34.323	ug/L	0.407	1	170	16977	1
[	Zn	68	36.222	ug/L	0.266	0	11162	85340	0
[	As	75	11.125	ug/L	0.175	1	106	32003	1
[	As-1	75	10.635	ug/L	0.155	1	13230	43311	0
[	Se	82	34.164	ug/L	0.556	1	-6	10697	1
[	Se	78	33.357	ug/L	0.814	2	13487	38879	0
[	Mo	98	10.286	ug/L	0.155	1	83	112571	0
	Y	89		ug/L			471707	474578	0
	Kr	83		ug/L			167	174	3
[>	In	115		ug/L			554281	543340 ✓	1
[	Ag	107	10.133	ug/L	0.065	0	139	188367	0
[	Cd	111	9.952	ug/L	0.092	0	343	45801	2
[	Cd	114	9.978	ug/L	0.157	1	30	105816	0
[	Sb	121	9.487	ug/L	0.053	0	158	142576	0
[	Sb	123	9.566	ug/L	0.118	1	129	107216	0
[	Ba	135	12.960	ug/L	0.331	2	55	44237	1
[	Ba	137	13.128	ug/L	0.407	3	86	75855	1
[>	Tb	159		ug/L			534474	540658 ✓	2
[	Tl	205	10.678	ug/L	0.054	0	174	421950	1
[	Pb	208	10.789	ug/L	0.128	1	823	572780	1
[	Bi	209		ug/L			470644	467993	0
[	Th	232	10.107	ug/L	0.213	2	1226	646741	0
[	U	238	10.153	ug/L	0.199	1	165	711058	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT65 ADUP REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, December 06, 2012 14:52:39
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	420003 ✓	0
[	Be	9	0.010	ug/L	0.006	62	3	8	37
	C	13		mg/L			4786	4437	1
	Cl	37		mg/L			2971886	2879322	0
[>	Sc	45		ug/L			393490	389760 ✓	0
[	V	51	0.355	ug/L	0.028	7	3664	10057	4
[	V-1	51	0.357	ug/L	0.008	2	1705	8250	1
[	Cr	52	0.569	ug/L	0.046	8	11009	20179	3
[	Cr	53	0.563	ug/L	0.027	4	617	1702	3
[	Mn	55	4.638	ug/L	0.073	1	588	124788	1
[	Co	59	0.103	ug/L	0.001	1	82	2303	1
[>	Ge	72		ug/L			494017	490232 ✓	0
[	Ni	60	0.375	ug/L	0.011	2	129	1678	2
[	Ni	62	0.469	ug/L	0.028	5	138	428	3
[	Cu	63	8.660	ug/L	0.079	0	437	82135	0
[	Cu	65	8.625	ug/L	0.070	0	143	39601	0
[	Zn	66	172.070	ug/L	1.100	0	699	487324	1
[	Zn	67	148.909	ug/L	0.498	0	170	72832	0
[	Zn	68	163.580	ug/L	2.751	1	11162	345090	1
[	As	75	0.180	ug/L	0.004	2	106	619	2
[	As-1	75	0.197	ug/L	0.051	25	13230	13686	0
[	Se	82	0.027	ug/L	0.008	28	-6	2	104
[	Se	78	0.103	ug/L	0.210	204	13487	13461	0
[	Mo	98	0.150	ug/L	0.005	3	83	1718	3
	Y	89		ug/L			471707	482975	0
	Kr	83		ug/L			167	171	3
[>	In	115		ug/L			554281	546004 ✓	1
[	Ag	107	0.004	ug/L	0.001	29	139	206	11
[	Cd	111	0.067	ug/L	0.006	8	343	643	4
[	Cd	114	0.050	ug/L	0.002	4	30	558	4
[	Sb	121	0.130	ug/L	0.002	1	158	2111	2
[	Sb	123	0.132	ug/L	0.005	3	129	1611	4
[	Ba	135	4.219	ug/L	0.082	1	55	14513	2
[	Ba	137	4.252	ug/L	0.061	1	86	24746	0
[>	Tb	159		ug/L			534474	544480 ✓	1
[	Tl	205	-0.000	ug/L	0.000	72	174	157	8
[	Pb	208	1.009	ug/L	0.032	3	823	54683	1
[	Bi	209		ug/L			470644	472106	0
[	Th	232	0.005	ug/L	0.003	63	1226	1601	12
[	U	238	0.002	ug/L	0.000	4	165	310	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT65 A REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, December 06, 2012 14:58:55
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	415989 ✓	1
[	Be	9	0.007	ug/L	0.004	53	3	6	28
	C	13		mg/L			4786	4301	2
	Cl	37		mg/L			2971886	2866010	0
[>	Sc	45		ug/L			393490	389731 ✓	1
|	V	51	0.301	ug/L	0.006	2	3664	9084	2
|	V-1	51	0.303	ug/L	0.004	1	1705	7270	1
|	Cr	52	0.527	ug/L	0.017	3	11009	19490	0
|	Cr	53	0.522	ug/L	0.025	4	617	1622	1
|	Mn	55	4.167	ug/L	0.093	2	588	112133	0
[	Co	59	0.090	ug/L	0.002	2	82	2020	2
[>	Ge	72		ug/L			494017	486801 ✓	0
|	Ni	60	0.339	ug/L	0.007	2	129	1521	1
|	Ni	62	0.386	ug/L	0.041	10	138	374	7
|	Cu	63	8.285	ug/L	0.091	1	437	78046	0
|	Cu	65	8.076	ug/L	0.209	2	143	36832	2
|	Zn	66	164.678	ug/L	1.777	1	699	463158	1
|	Zn	67	141.414	ug/L	0.507	0	170	68690	0
|	Zn	68	155.635	ug/L	1.939	1	11162	326546	0
|	As	75	0.164	ug/L	0.015	9	106	569	6
|	As-1	75	0.224	ug/L	0.079	35	13230	13663	0
|	Se	82	0.010	ug/L	0.045	464	-6	-3	434
|	Se	78	0.230	ug/L	0.258	112	13487	13462	0
[	Mo	98	0.124	ug/L	0.002	1	83	1424	1
	Y	89		ug/L			471707	476261	1
	Kr	83		ug/L			167	166	6
[>	In	115		ug/L			554281	548136 ✓	0
|	Ag	107	0.002	ug/L	0.001	85	139	167	15
|	Cd	111	0.050	ug/L	0.018	35	343	572	15
|	Cd	114	0.045	ug/L	0.003	6	30	508	6
|	Sb	121	0.121	ug/L	0.004	2	158	1990	3
|	Sb	123	0.119	ug/L	0.002	1	129	1469	2
|	Ba	135	3.878	ug/L	0.017	0	55	13396	0
[	Ba	137	3.873	ug/L	0.022	0	86	22640	0
[>	Tb	159		ug/L			534474	541018 ✓	0
|	Tl	205	-0.001	ug/L	0.000	7	174	117	4
|	Pb	208	0.948	ug/L	0.005	0	823	51135	0
|	Bi	209		ug/L			470644	469988	0
|	Th	232	-0.005	ug/L	0.001	10	1226	920	4
[	U	238	0.002	ug/L	0.000	9	165	272	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT65 ASPK REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, December 06, 2012 15:05:11
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	419355 ✓	1
[	Be	9	5.809	ug/L	0.046	0	3	2899	1
	C	13		mg/L			4786	4411	2
	Cl	37		mg/L			2971886	2889514	0
[>	Sc	45		ug/L			393490	392051 ✓	0
[	V	51	6.390	ug/L	0.147	2	3664	120046	1
[	V-1	51	6.433	ug/L	0.089	1	1705	120795	1
[	Cr	52	6.567	ug/L	0.143	2	11009	118602	1
[	Cr	53	6.689	ug/L	0.074	1	617	13641	1
[	Mn	55	10.562	ug/L	0.135	1	588	285066	0
[	Co	59	6.252	ug/L	0.074	1	82	136011	1
[>	Ge	72		ug/L			494017	493272 ✓	0
[	Ni	60	7.358	ug/L	0.074	1	129	30772	0
[	Ni	62	7.308	ug/L	0.082	1	138	4695	0
[	Cu	63	15.663	ug/L	0.324	2	437	149144	2
[	Cu	65	15.258	ug/L	0.402	2	143	70387	3
[	Zn	66	187.311	ug/L	2.324	1	699	533724	1
[	Zn	67	161.979	ug/L	1.054	0	170	79703	1
[	Zn	68	177.849	ug/L	2.023	1	11162	376561	1
[	As	75	6.678	ug/L	0.098	1	106	19304	1
[	As-1	75	6.396	ug/L	0.135	2	13230	31383	1
[	Se	82	20.686	ug/L	0.282	1	-6	6492	1
[	Se	78	20.272	ug/L	0.489	2	13487	28973	1
[	Mo	98	0.132	ug/L	0.004	2	83	1526	2
	Y	89		ug/L			471707	478365	0
	Kr	83		ug/L			167	176	3
[>	In	115		ug/L			554281	540162 ✓	1
[	Ag	107	6.254	ug/L	0.050	0	139	115613	0
[	Cd	111	6.150	ug/L	0.115	1	343	28262	1
[	Cd	114	6.157	ug/L	0.133	2	30	64921	1
[	Sb	121	0.131	ug/L	0.002	1	158	2113	0
[	Sb	123	0.127	ug/L	0.005	3	129	1537	2
[	Ba	135	10.197	ug/L	0.230	2	55	34613	0
[	Ba	137	10.292	ug/L	0.197	1	86	59142	0
[>	Tb	159		ug/L			534474	542357 ✓	0
[	Tl	205	6.316	ug/L	0.038	0	174	250440	0
[	Pb	208	7.386	ug/L	0.040	0	823	393659	0
[	Bi	209		ug/L			470644	471476	1
[	Th	232	5.657	ug/L	0.094	1	1226	363812	2
[	U	238	5.871	ug/L	0.056	0	165	412650	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 15:11:31
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	408746 ✓	2
[	Be	9	49.707	ug/L	0.943	1	3	24157	1
	C	13		mg/L			4786	3900	1
	Cl	37		mg/L			2971886	2885515	0
[>	Sc	45		ug/L			393490	390060 ✓	1
[	V	51	49.624	ug/L	0.433	0	3664	902949	0
[	V-1	51	49.634	ug/L	0.490	0	1705	915811	0
[	Cr	52	49.777	ug/L	0.549	1	11009	822706	1
[	Cr	53	49.798	ug/L	0.686	1	617	97078	0
[	Mn	55	49.876	ug/L	0.398	0	588	1337172	1
[	Co	59	49.915	ug/L	1.081	2	82	1079447	0
[>	Ge	72		ug/L			494017	488659 ✓	0
[	Ni	60	56.058	ug/L	1.081	1	129	231375	1
[	Ni	62	56.108	ug/L	0.927	1	138	34796	0
[	Cu	63	54.407	ug/L	0.241	0	437	512095	0
[	Cu	65	52.844	ug/L	0.400	0	143	241114	0
[	Zn	66	52.990	ug/L	0.716	1	699	150074	2
[	Zn	67	53.929	ug/L	0.701	1	170	26400	1
[	Zn	68	51.635	ug/L	0.370	0	11162	116139	1
[	As	75	50.120	ug/L	0.290	0	106	142827	0
[	As-1	75	50.116	ug/L	0.499	0	13230	154140	0
[	Se	82	52.170	ug/L	0.420	0	-6	16227	0
[	Se	78	52.272	ug/L	1.078	2	13487	52948	0
[	Mo	98	50.856	ug/L	0.513	1	83	552498	0
	Y	89		ug/L			471707	466155	0
	Kr	83		ug/L			167	182	6
[>	In	115		ug/L			554281	540343 ✓	1
[	Ag	107	50.635	ug/L	0.651	1	139	935479	1
[	Cd	111	49.989	ug/L	0.536	1	343	227416	0
[	Cd	114	49.713	ug/L	1.011	2	30	524120	0
[	Sb	121	47.027	ug/L	0.706	1	158	702198	0
[	Sb	123	47.035	ug/L	0.658	1	129	523734	0
[	Ba	135	47.575	ug/L	0.518	1	55	161363	0
[	Ba	137	48.137	ug/L	0.676	1	86	276426	0
[>	Tb	159		ug/L			534474	532013 ✓	1
[	Tl	205	50.754	ug/L	0.190	0	174	1973001	1
[	Pb	208	51.176	ug/L	0.397	0	823	2670834	1
[	Bi	209		ug/L			470644	450769	0
[	Th	232	51.813	ug/L	0.616	1	1226	3258127	0
[	U	238	51.543	ug/L	0.431	0	165	3552248	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 15:18:10
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	411209 ✓	1
[	Be	9	0.006	ug/L	0.008	127	3	6	60
	C	13		mg/L			4786	4511	2
	Cl	37		mg/L			2971886	2942151	0
[>	Sc	45		ug/L			393490	392921 ✓	0
[	V	51	-0.006	ug/L	0.000	2	3664	3544	0
[	V-1	51	-0.007	ug/L	0.002	26	1705	1581	1
[	Cr	52	-0.007	ug/L	0.008	112	11009	10882	1
[	Cr	53	-0.008	ug/L	0.007	85	617	601	1
[	Mn	55	-0.004	ug/L	0.000	10	588	492	2
[	Co	59	-0.000	ug/L	0.000	56	82	73	6
[>	Ge	72		ug/L			494017	494737 ✓	1
[	Ni	60	0.000	ug/L	0.003	1524	129	130	12
[	Ni	62	0.016	ug/L	0.013	82	138	148	5
[	Cu	63	-0.011	ug/L	0.001	6	437	329	2
[	Cu	65	-0.002	ug/L	0.002	137	143	136	8
[	Zn	66	0.009	ug/L	0.002	25	699	724	1
[	Zn	67	-0.011	ug/L	0.020	171	170	164	5
[	Zn	68	0.018	ug/L	0.061	339	11162	11214	0
[	As	75	-0.004	ug/L	0.005	131	106	96	15
[	As-1	75	0.108	ug/L	0.101	93	13230	13554	0
[	Se	82	-0.027	ug/L	0.037	136	-6	-14	78
[	Se	78	0.428	ug/L	0.382	89	13487	13832	0
[	Mo	98	0.005	ug/L	0.002	34	83	137	13
	Y	89		ug/L			471707	479584	1
	Kr	83		ug/L			167	180	3
[>	In	115		ug/L			554281	549778 ✓	0
[	Ag	107	0.000	ug/L	0.002	414	139	145	21
[	Cd	111	0.004	ug/L	0.000	11	343	358	0
[	Cd	114	-0.001	ug/L	0.000	51	30	23	16
[	Sb	121	0.012	ug/L	0.006	53	158	342	28
[	Sb	123	0.012	ug/L	0.005	40	129	260	20
[	Ba	135	0.000	ug/L	0.001	360	55	56	8
[	Ba	137	0.001	ug/L	0.001	98	86	91	6
[>	Tb	159		ug/L			534474	546781 ✓	0
[	Tl	205	0.002	ug/L	0.001	50	174	265	16
[	Pb	208	-0.000	ug/L	0.002	10840	823	841	9
[	Bi	209		ug/L			470644	468527	1
[	Th	232	0.021	ug/L	0.009	42	1226	2592	21
[	U	238	-0.000	ug/L	0.001	180	165	145	28

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT79 MB REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 15:42:11
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	429451 ✓	1
[	Be	9	0.005	ug/L	0.001	27	3	5	12
	C	13		mg/L			4786	5138	5
	Cl	37		mg/L			2971886	2871608	0
[>	Sc	45		ug/L			393490	398042 ✓	0
	V	51	-0.001	ug/L	0.007	952	3664	3693	3
	V-1	51	-0.001	ug/L	0.001	161	1705	1707	1
	Cr	52	U 0.015	ug/L	0.010	66	11009	11387	1
	Cr	53	0.014	ug/L	0.024	174	617	651	7
	Mn	55	0.036	ug/L	0.002	6	588	1582	3
[	Co	59	0.001	ug/L	0.000	46	82	102	8
[>	Ge	72		ug/L			494017	503051 ✓	1
	Ni	60	-0.003	ug/L	0.005	155	129	118	16
	Ni	62	-0.028	ug/L	0.013	46	138	123	7
	Cu	63	0.118	ug/L	0.006	5	437	1588	2
	Cu	65	0.123	ug/L	0.007	5	143	725	3
	Zn	66	U 2.832	ug/L	0.032	1	699	8929	0
	Zn	67	2.461	ug/L	0.111	4	170	1405	3
	Zn	68	2.730	ug/L	0.078	2	11162	17086	0
	As	75	U -0.012	ug/L	0.008	68	106	73	34
	As-1	75	0.035	ug/L	0.055	159	13230	13571	0
	Se	82	0.041	ug/L	0.035	85	-6	6	163
	Se	78	0.188	ug/L	0.224	119	13487	13879	0
[	Mo	98	-0.000	ug/L	0.002	377	83	79	23
	Y	89		ug/L			471707	494935	1
	Kr	83		ug/L			167	162	1
[>	In	115		ug/L			554281	559720 ✓	0
	Ag	107	-0.002	ug/L	0.000	16	139	100	6
	Cd	111	U 0.005	ug/L	0.007	154	343	369	9
	Cd	114	-0.000	ug/L	0.000	327	30	29	18
	Sb	121	-0.006	ug/L	0.001	12	158	64	18
	Sb	123	-0.007	ug/L	0.001	13	129	52	20
	Ba	135	0.006	ug/L	0.001	21	55	77	6
[	Ba	137	0.011	ug/L	0.002	20	86	152	8
[>	Tb	159		ug/L			534474	557151 ✓	0
	Tl	205	-0.001	ug/L	0.000	33	174	129	12
	Pb	208	U 0.001	ug/L	0.001	57	823	909	2
	Bi	209		ug/L			470644	478145	1
	Th	232	-0.005	ug/L	0.002	35	1226	920	13
[	U	238	-0.001	ug/L	0.000	55	165	111	29

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT81 MB REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 15:48:31
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			415979	428558 ✓	2
[	Be	9	0.005		ug/L	0.005	109	3	5	44
	C	13			mg/L			4786	5237	1
	Cl	37			mg/L			2971886	2865055	0
[>	Sc	45			ug/L			393490	402667 ✓	1
[	V	51	-0.008		ug/L	0.002	21	3664	3593	2
[	V-1	51	-0.007		ug/L	0.003	47	1705	1605	2
[	Cr	52	0.086		ug/L	0.016	18	11009	12713	1
[	Cr	53	0.085		ug/L	0.024	27	617	800	4
[	Mn	55	0.036		ug/L	0.003	8	588	1586	3
[	Co	59	-0.000		ug/L	0.001	115	82	73	15
[>	Ge	72			ug/L			494017	503741 ✓	1
[	Ni	60	0.003		ug/L	0.003	133	129	143	11
[	Ni	62	-0.002		ug/L	0.020	1119	138	140	9
[	Cu	63	U	0.130	ug/L	0.004	3	437	1710	2
[	Cu	65		0.132	ug/L	0.003	2	143	765	3
[	Zn	66	U	0.797	ug/L	0.013	1	699	3030	2
[	Zn	67		0.698	ug/L	0.068	9	170	523	6
[	Zn	68		0.651	ug/L	0.074	11	11162	12745	0
[	As	75	-0.011		ug/L	0.011	105	106	78	42
[	As-1	75	0.024		ug/L	0.067	279	13230	13558	0
[	Se	82	0.054		ug/L	0.057	105	-6	11	165
[	Se	78	0.148		ug/L	0.251	169	13487	13866	0
[	Mo	98	0.003		ug/L	0.002	56	83	119	15
	Y	89			ug/L			471707	496336	1
	Kr	83			ug/L			167	160	5
[>	In	115			ug/L			554281	560462 ✓	0
[	Ag	107	-0.004		ug/L	0.000	6	139	69	6
[	Cd	111	0.003		ug/L	0.002	83	343	361	3
[	Cd	114	0.002		ug/L	0.001	35	30	52	14
[	Sb	121	-0.007		ug/L	0.000	4	158	53	10
[	Sb	123	-0.007		ug/L	0.001	13	129	46	24
[	Ba	135	0.007		ug/L	0.001	11	55	81	3
[	Ba	137	0.011		ug/L	0.001	9	86	152	4
[>	Tb	159			ug/L			534474	557803 ✓	2
[	Tl	205	-0.003		ug/L	0.000	10	174	73	13
[	Pb	208	U	0.004	ug/L	0.000	6	823	1096	3
[	Bi	209			ug/L			470644	481217	1
[	Th	232	-0.010		ug/L	0.000	3	1226	606	3
[	U	238	-0.001		ug/L	0.000	4	165	72	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 A REN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, December 06, 2012 15:54:50
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	416255 ✓	1
[	Be	9	0.020	ug/L	0.006	31	3	13	23
	C	13		mg/L			4786	4289	1
	Cl	37		mg/L			2971886	2810906	0
[>	Sc	45		ug/L			393490	403143 ✓	1
[	V	51	1.808	ug/L	0.069	3	3664	37620	4
[	V-1	51	1.848	ug/L	0.041	2	1705	36921	3
[	Cr	52	3.837	ug/L	0.055	1	11009	75944	0
[	Cr	53	3.859	ug/L	0.110	2	617	8358	1
[	Mn	55	81.782	ug/L	1.225	1	588	2265778	1
[	Co	59	0.562	ug/L	0.025	4	82	12641	3
[>	Ge	72		ug/L			494017	500425 ✓	0
[	Ni	60	3.191	ug/L	0.044	1	129	13613	1
[	Ni	62	3.504	ug/L	0.022	0	138	2357	1
[	Cu	63	15.034	ug/L	0.284	1	437	145248	2
[	Cu	65	15.035	ug/L	0.178	1	143	70363	1
[	Zn	66	212.222	ug/L	2.868	1	699	613399	2
[	Zn	67	182.904	ug/L	0.474	0	170	91280	0
[	Zn	68	203.755	ug/L	3.009	1	11162	436043	2
[	As	75	0.576	ug/L	0.019	3	106	1788	3
[	As-1	75	0.542	ug/L	0.041	7	13230	14963	0
[	Se	82	0.139	ug/L	0.053	38	-6	37	45
[	Se	78	0.002	ug/L	0.213	13731	13487	13662	0
[	Mo	98	2.614	ug/L	0.032	1	83	29167	2
	Y	89		ug/L			471707	496470	1
	Kr	83		ug/L			167	172	7
[>	In	115		ug/L			554281	553934 ✓	2
[	Ag	107	0.050	ug/L	0.004	8	139	1078	9
[	Cd	111	0.559	ug/L	0.010	1	343	2948	2
[	Cd	114	0.525	ug/L	0.008	1	30	5702	2
[	Sb	121	0.642	ug/L	0.017	2	158	9985	1
[	Sb	123	0.644	ug/L	0.009	1	129	7474	1
[	Ba	135	15.024	ug/L	0.331	2	55	52276	2
[	Ba	137	15.186	ug/L	0.447	2	86	89431	1
[>	Tb	159		ug/L			534474	551392 ✓	0
[	Tl	205	0.003	ug/L	0.001	18	174	320	8
[	Pb	208	31.172	ug/L	0.493	1	823	1686480	2
[	Bi	209		ug/L			470644	478491	0
[	Th	232	0.053	ug/L	0.001	1	1226	4737	1
[	U	238	0.018	ug/L	0.001	4	165	1450	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 B REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, December 06, 2012 16:01:09
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			415979	411193 ✓	3
[	Be	9	0.003		ug/L	0.006	227	3	4	62
	C	13			mg/L			4786	4141	1
	Cl	37			mg/L			2971886	2769628	0
[>	Sc	45			ug/L			393490	394920 ✓	2
[	V	51	0.075		ug/L	0.004	5	3664	5055	1
[	V-1	51	0.073		ug/L	0.001	0	1705	3077	1
[	Cr	52	-0.009		ug/L	0.013	144	11009	10900	1
[	Cr	53	-0.010		ug/L	0.003	33	617	599	1
[	Mn	55	0.754		ug/L	0.006	0	588	21048	2
[	Co	59	0.002		ug/L	0.000	20	82	125	8
[>	Ge	72			ug/L			494017	490946 ✓	0
[	Ni	60	U	0.003	ug/L	0.001	43	129	142	4
[	Ni	62		-0.002	ug/L	0.022	1167	138	136	9
[	Cu	63	U	0.142	ug/L	0.009	6	437	1778	4
[	Cu	65		0.121	ug/L	0.006	4	143	695	4
[	Zn	66		0.596	ug/L	0.022	3	699	2383	3
[	Zn	67		0.532	ug/L	0.053	9	170	428	5
[	Zn	68		0.597	ug/L	0.095	15	11162	12313	1
[	As	75		0.139	ug/L	0.004	2	106	503	2
[	As-1	75		0.292	ug/L	0.028	9	13230	13972	0
[	Se	82		0.029	ug/L	0.025	84	-6	2	269
[	Se	78		0.578	ug/L	0.092	15	13487	13843	0
[	Mo	98		0.208	ug/L	0.003	1	83	2348	1
	Y	89			ug/L			471707	489847	1
	Kr	83			ug/L			167	163	3
[>	In	115			ug/L			554281	548668 ✓	1
[	Ag	107	-0.002		ug/L	0.000	4	139	101	0
[	Cd	111	-0.000		ug/L	0.002	498	343	338	3
[	Cd	114	0.002		ug/L	0.000	16	30	52	8
[	Sb	121	0.001		ug/L	0.000	49	158	167	4
[	Sb	123	0.002		ug/L	0.001	51	129	155	10
[	Ba	135	0.706		ug/L	0.008	1	55	2486	0
[	Ba	137	0.719		ug/L	0.016	2	86	4275	0
[>	Tb	159			ug/L			534474	555696 ✓	1
[	Tl	205	-0.002		ug/L	0.001	28	174	102	22
[	Pb	208	0.107		ug/L	0.001	0	823	6692	1
[	Bi	209			ug/L			470644	470262	1
[	Th	232	0.036		ug/L	0.002	6	1226	3617	2
[	U	238	0.002		ug/L	0.000	10	165	300	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 D REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, December 06, 2012 16:07:28
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	412327 ✓	1
[	Be	9	0.004	ug/L	0.008	182	3	5	70
	C	13		mg/L			4786	4142	1
	Cl	37		mg/L			2971886	2846015	0
[>	Sc	45		ug/L			393490	397139 ✓	0
[	V	51	0.110	ug/L	0.010	8	3664	5720	3
[	V-1	51	0.134	ug/L	0.003	2	1705	4236	1
[	Cr	52	0.057	ug/L	0.007	12	11009	12057	0
[	Cr	53	0.134	ug/L	0.037	27	617	888	7
[	Mn	55	2.825	ug/L	0.013	0	588	77665	0
[	Co	59	0.013	ug/L	0.001	8	82	376	7
[>	Ge	72		ug/L			494017	480649 ✓	0
[	Ni	60	0.192	ug/L	0.004	2	129	906	2
[	Ni	62	1.093	ug/L	0.101	9	138	799	8
[	Cu	63	1.454	ug/L	0.015	1	437	13874	0
[	Cu	65	0.518	ug/L	0.023	4	143	2462	3
[	Zn	66	0.405	ug/L	0.008	1	699	1802	1
[	Zn	67	0.441	ug/L	0.043	9	170	376	6
[	Zn	68	0.501	ug/L	0.111	22	11162	11862	1
[	As	75	0.607	ug/L	0.009	1	106	1803	2
[	As-1	75	0.721	ug/L	0.061	8	13230	14867	0
[	Se	82	0.103	ug/L	0.021	20	-6	25	26
[	Se	78	0.511	ug/L	0.251	49	13487	13501	0
[	Mo	98	3.717	ug/L	0.044	1	83	39789	0
	Y	89		ug/L			471707	491996	0
	Kr	83		ug/L			167	165	2
[>	In	115		ug/L			554281	523405 ✓	1
[	Ag	107	-0.003	ug/L	0.000	4	139	71	2
[	Cd	111	-0.127	ug/L	0.037	29	343	-231	68
[	Cd	114	0.009	ug/L	0.001	14	30	119	9
[	Sb	121	0.176	ug/L	0.002	1	158	2689	0
[	Sb	123	0.185	ug/L	0.006	3	129	2118	1
[	Ba	135	3.850	ug/L	0.095	2	55	12698	2
[	Ba	137	3.848	ug/L	0.095	2	86	21478	1
[>	Tb	159		ug/L			534474	546605 ✓	0
[	Tl	205	-0.002	ug/L	0.001	28	174	97	23
[	Pb	208	0.031	ug/L	0.001	2	823	2527	2
[	Bi	209		ug/L			470644	438618	0
[	Th	232	-0.005	ug/L	0.000	8	1226	914	3
[	U	238	0.246	ug/L	0.002	0	165	17605	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VU18 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 16:13:47
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

Del

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	423728 ✓	2
[	Be	9	0.012	ug/L	0.008	66	3	9	41
	C	13		mg/L			4786	5022	1
	Cl	37		mg/L			2971886	2430303	3
[>	Sc	45		ug/L			393490	435130 ✓	3
[	V	51	18.454	ug/L	0.136	0	3664	377224	4
[	V-1	51	18.432	ug/L	0.102	0	1705	380660	4
[	Cr	52	9.360	ug/L	0.188	2	11009	182549	5
[	Cr	53	9.735	ug/L	0.203	2	617	21726	4
[	Mn	55	0.898	ug/L	0.017	1	588	27508	3
[	Co	59	0.139	ug/L	0.002	1	82	3441	2
[>	Ge	72		ug/L			494017	446417 ✓	2
[	Ni	60	4.840	ug/L	0.305	6	129	18361	7
[	Ni	62	1.884	ug/L	0.088	4	138	1189	5
[	Cu	63	3.737	ug/L	0.067	1	437	32507	4
[	Cu	65	4.260	ug/L	0.041	0	143	17878	3
[	Zn	66	6.272	ug/L	0.071	1	699	16785	3
[	Zn	67	8.335	ug/L	0.329	3	170	3859	6
[	Zn	68	5.819	ug/L	0.048	0	11162	20908	2
[	As	75	0.868	ug/L	0.043	4	106	2353	2
[	As-1	75	0.635	ug/L	0.024	3	13230	13588	2
[	Se	82	4.195	ug/L	0.057	1	-6	1186	1
[	Se	78	3.515	ug/L	0.125	3	13487	14622	3
[	Mo	98	11.879	ug/L	0.141	1	83	117942	1
	Y	89		ug/L			471707	477109	1
	Kr	83		ug/L			167	162	7
[>	In	115		ug/L			554281	500582 ✓	4
[	Ag	107	-0.002	ug/L	0.001	43	139	92	12
[	Cd	111	0.050	ug/L	0.005	10	343	519	7
[	Cd	114	0.053	ug/L	0.002	3	30	550	6
[	Sb	121	2.147	ug/L	0.007	0	158	29839	3
[	Sb	123	2.151	ug/L	0.032	1	129	22301	4
[	Ba	135	18.303	ug/L	0.322	1	55	57525	2
[	Ba	137	18.549	ug/L	0.330	1	86	98695	2
[>	Tb	159		ug/L			534474	548845 ✓	2
[	Tl	205	0.596	ug/L	0.002	0	174	24082	2
[	Pb	208	0.877	ug/L	0.004	0	823	48065	2
[	Bi	209		ug/L			470644	434630	1
[	Th	232	0.025	ug/L	0.001	4	1226	2895	2
[	U	238	0.238	ug/L	0.002	0	165	17083	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VU22 E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 16:20:04
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	409342 ✓	2
[	Be	9	0.018	ug/L	0.003	18	3	12	15
	C	13		mg/L			4786	8260	2
	Cl	37		mg/L			2971886	2503318	0
[>	Sc	45		ug/L			393490	415776 ✓	3
[	V	51	1.618	ug/L	0.041	2	3664	35112	2
[	V-1	51	1.614	ug/L	0.032	1	1705	33480	2
[	Cr	52	0.265	ug/L	0.023	8	11009	16226	2
[	Cr	53	0.319	ug/L	0.026	8	617	1311	3
[	Mn	55	4747.107	ug/L	140.413	2	588	135523635	1
[	Co	59	4.350	ug/L	0.137	3	82	100296	0
[>	Ge	72		ug/L			494017	425591 ✓	1
[	Ni	60	8.488	ug/L	0.272	3	129	30603	2
[	Ni	62	6.282	ug/L	0.244	3	138	3498	2
[	Cu	63	2.358	ug/L	0.036	1	437	19690	0
[	Cu	65	2.301	ug/L	0.031	1	143	9261	0
[	Zn	66	7.071	ug/L	0.165	2	699	17959	1
[	Zn	67	9.374	ug/L	0.061	0	170	4117	1
[	Zn	68	9.205	ug/L	0.232	2	11162	25930	0
[	As	75	7.486	ug/L	0.059	0	106	18656	0
[	As-1	75	7.305	ug/L	0.105	1	13230	29304	0
[	Se	82	2.671	ug/L	0.049	1	-6	718	1
[	Se	78	1.834	ug/L	0.222	12	13487	12828	0
[	Mo	98	9.667	ug/L	0.128	1	83	91517	0
	Y	89		ug/L			471707	451719	0
	Kr	83		ug/L			167	154	4
[>	In	115		ug/L			554281	475712 ✓	1
[	Ag	107	0.007	ug/L	0.000	6	139	233	4
[	Cd	111	0.085	ug/L	0.014	16	343	635	7
[	Cd	114	0.061	ug/L	0.003	4	30	589	5
[	Sb	121	3.874	ug/L	0.046	1	158	51049	1
[	Sb	123	3.894	ug/L	0.082	2	129	38268	0
[	Ba	135	102.237	ug/L	1.934	1	55	305217	0
[	Ba	137	103.807	ug/L	1.843	1	86	524702	0
[>	Tb	159		ug/L			534474	517966 ✓	0
[	Tl	205	0.027	ug/L	0.001	4	174	1183	4
[	Pb	208	0.170	ug/L	0.004	2	823	9427	1
[	Bi	209		ug/L			470644	416161	0
[	Th	232	0.008	ug/L	0.001	13	1226	1660	3
[	U	238	1.954	ug/L	0.036	1	165	131239	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT79 B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 16:26:21
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	425776 ✓	1
[	Be	9	0.014	ug/L	0.005	35	3	10	24
	C	13		mg/L			4786	5233	1
	Cl	37		mg/L			2971886	2427925	0
[>	Sc	45		ug/L			393490	385553 ✓	1
[	V	51	0.609	ug/L	0.033	5	3664	14496	2
[	V-1	51	0.628	ug/L	0.025	4	1705	13102	1
[	Cr	52	U 0.335	ug/L	0.045	13	11009	16179	2
[	Cr	53	0.406	ug/L	0.031	7	617	1382	3
[	Mn	55	7.662	ug/L	0.273	3	588	203478	2
[	Co	59	0.149	ug/L	0.008	5	82	3274	4
[>	Ge	72		ug/L			494017	442735 ✓	1
[	Ni	60	1.074	ug/L	0.047	4	129	4130	4
[	Ni	62	0.855	ug/L	0.019	2	138	602	2
[	Cu	63	0.629	ug/L	0.006	0	437	5754	1
[	Cu	65	0.615	ug/L	0.018	2	143	2670	3
[	Zn	66	57.387	ug/L	1.257	2	699	147180	1
[	Zn	67	49.255	ug/L	0.892	1	170	21856	1
[	Zn	68	54.575	ug/L	0.692	1	11162	110639	1
[	As	75	U 0.179	ug/L	0.012	6	106	557	4
[	As-1	75	-0.016	ug/L	0.069	437	13230	11815	0
[	Se	82	0.089	ug/L	0.026	28	-6	19	37
[	Se	78	-0.646	ug/L	0.232	35	13487	11642	0
[	Mo	98	0.014	ug/L	0.003	22	83	210	15
	Y	89		ug/L			471707	451065	0
	Kr	83		ug/L			167	147	3
[>	In	115		ug/L			554281	498297 ✓	0
[	Ag	107	-0.003	ug/L	0.001	26	139	75	18
[	Cd	111	U 0.048	ug/L	0.011	22	343	510	8
[	Cd	114	0.045	ug/L	0.001	2	30	468	2
[	Sb	121	0.013	ug/L	0.002	16	158	327	8
[	Sb	123	0.012	ug/L	0.002	15	129	236	8
[	Ba	135	6.032	ug/L	0.081	1	55	18912	1
[	Ba	137	6.135	ug/L	0.120	1	86	32558	1
[>	Tb	159		ug/L			534474	548290 ✓	1
[	Tl	205	-0.001	ug/L	0.000	19	174	142	5
[	Pb	208	0.111	ug/L	0.004	3	823	6791	2
[	Bi	209		ug/L			470644	457199	1
[	Th	232	-0.002	ug/L	0.001	25	1226	1115	4
[	U	238	0.006	ug/L	0.000	7	165	585	6

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VU18 MBSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 16:32:37
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	460072 ✓	1
[	Be	9	22.748	ug/L	0.076	0	3	12448	1
	C	13		mg/L			4786	5440	2
	Cl	37		mg/L			2971886	2587856	0
[>	Sc	45		ug/L			393490	374686 ✓	1
[	V	51	23.855	ug/L	0.094	0	3664	418819	2
[	V-1	51	24.039	ug/L	0.113	0	1705	426914	1
[	Cr	52	23.774	ug/L	0.148	0	11009	382917	1
[	Cr	53	24.335	ug/L	0.765	3	617	45858	1
[	Mn	55	25.057	ug/L	0.512	2	588	645441	0
[	Co	59	24.630	ug/L	0.473	1	82	511663	0
[>	Ge	72		ug/L			494017	465265 ✓	1
[	Ni	60	27.774	ug/L	0.648	2	129	109190	0
[	Ni	62	27.802	ug/L	1.085	3	138	16476	2
[	Cu	63	27.391	ug/L	0.623	2	437	245615	1
[	Cu	65	27.066	ug/L	0.883	3	143	117608	1
[	Zn	66	82.018	ug/L	2.241	2	699	220723	1
[	Zn	67	74.164	ug/L	0.968	1	170	34506	2
[	Zn	68	77.637	ug/L	0.974	1	11162	160956	1
[	As	75	26.097	ug/L	0.645	2	106	70838	0
[	As-1	75	24.385	ug/L	0.708	2	13230	77789	0
[	Se	82	85.145	ug/L	2.221	2	-6	25213	0
[	Se	78	81.340	ug/L	2.562	3	13487	71369	0
[	Mo	98	25.175	ug/L	0.389	1	83	260416	0
	Y	89		ug/L			471707	483249	1
	Kr	83		ug/L			167	160	1
[>	In	115		ug/L			554281	527387 ✓	0
[	Ag	107	24.915	ug/L	0.365	1	139	449339	1
[	Cd	111	23.879	ug/L	0.055	0	343	106209	0
[	Cd	114	23.803	ug/L	0.205	0	30	244989	0
[	Sb	121	22.509	ug/L	0.220	0	158	328153	0
[	Sb	123	22.681	ug/L	0.297	1	129	246580	0
[	Ba	135	24.902	ug/L	0.248	0	55	82466	0
[	Ba	137	25.330	ug/L	0.384	1	86	142019	1
[>	Tb	159		ug/L			534474	581471 ✓	0
[	Tl	205	25.291	ug/L	0.298	1	174	1074613	1
[	Pb	208	25.635	ug/L	0.156	0	823	1462671	0
[	Bi	209		ug/L			470644	497033	1
[	Th	232	24.042	ug/L	0.145	0	1226	1653211	1
[	U	238	23.972	ug/L	0.257	1	165	1805751	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT79 MBSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 16:38:53
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	461765 ✓	0
[	Be	9	22.872	ug/L	0.633	2	3	12561	2
	C	13		mg/L			4786	5163	1
	Cl	37		mg/L			2971886	2605189	1
[>	Sc	45		ug/L			393490	378825 ✓	1
[	V	51	23.699	ug/L	0.365	1	3664	420623	1
[	V-1	51	23.640	ug/L	0.460	1	1705	424465	1
[	Cr	52	23.766	ug/L	0.387	1	11009	386975	0
[	Cr	53	23.584	ug/L	0.656	2	617	44957	1
[	Mn	55	24.599	ug/L	0.605	2	588	640666	1
[	Co	59	23.869	ug/L	0.936	3	82	501254	2
[>	Ge	72		ug/L			494017	463155 ✓	0
[	Ni	60	27.756	ug/L	0.249	0	129	108650	0
[	Ni	62	27.900	ug/L	0.059	0	138	16466	0
[	Cu	63	27.328	ug/L	0.441	1	437	244004	1
[	Cu	65	26.814	ug/L	0.260	0	143	116039	1
[	Zn	66	82.541	ug/L	0.669	0	699	221195	1
[	Zn	67	74.515	ug/L	0.607	0	170	34513	1
[	Zn	68	77.798	ug/L	0.691	0	11162	160548	1
[	As	75	26.000	ug/L	0.338	1	106	70281	1
[	As-1	75	24.303	ug/L	0.056	0	13230	77239	0
[	Se	82	84.791	ug/L	0.534	0	-6	25002	0
[	Se	78	81.012	ug/L	1.112	1	13487	70829	0
[	Mo	98	0.003	ug/L	0.002	71	83	110	21
	Y	89		ug/L			471707	479095	0
	Kr	83		ug/L			167	156	1
[>	In	115		ug/L			554281	528737 ✓	0
[	Ag	107	24.737	ug/L	0.247	0	139	447293	1
[	Cd	111	23.831	ug/L	0.330	1	343	106276	2
[	Cd	114	23.546	ug/L	0.062	0	30	242982	0
[	Sb	121	-0.002	ug/L	0.001	43	158	125	9
[	Sb	123	-0.000	ug/L	0.001	6246	129	123	10
[	Ba	135	24.488	ug/L	0.158	0	55	81305	0
[	Ba	137	24.611	ug/L	0.172	0	86	138344	0
[>	Tb	159		ug/L			534474	580805 ✓	1
[	Tl	205	24.864	ug/L	0.079	0	174	1055268	0
[	Pb	208	25.450	ug/L	0.167	0	823	1450491	1
[	Bi	209		ug/L			470644	497194	0
[	Th	232	24.098	ug/L	0.203	0	1226	1655016	0
[	U	238	23.927	ug/L	0.261	1	165	1800407	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 16:45:10
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			415979	440836 ✓	2
	Be	9	48.774	ug/L	0.859	1	3	25561	1
	C	13		mg/L			4786	3685	2
	Cl	37		mg/L			2971886	2578729	1
>	Sc	45		ug/L			393490	368810 ✓	0
	V	51	48.497	ug/L	1.386	2	3664	834369	2
	V-1	51	48.561	ug/L	1.285	2	1705	847211	1
	Cr	52	48.363	ug/L	1.219	2	11009	756032	1
	Cr	53	48.566	ug/L	0.663	1	617	89538	0
	Mn	55	49.785	ug/L	1.394	2	588	1261885	1
	Co	59	49.282	ug/L	1.272	2	82	1007752	1
>	Ge	72		ug/L			494017	466133 ✓	1
	Ni	60	54.549	ug/L	1.232	2	129	214742	0
	Ni	62	54.510	ug/L	1.236	2	138	32246	0
	Cu	63	51.808	ug/L	1.379	2	437	465061	1
	Cu	65	51.269	ug/L	0.900	1	143	223119	0
	Zn	66	51.663	ug/L	0.730	1	699	139570	1
	Zn	67	53.161	ug/L	0.597	1	170	24824	1
	Zn	68	50.458	ug/L	0.638	1	11162	108485	0
	As	75	50.946	ug/L	0.551	1	106	138482	1
	As-1	75	50.226	ug/L	0.369	0	13230	147329	1
	Se	82	55.503	ug/L	1.027	1	-6	16466	0
	Se	78	53.054	ug/L	0.858	1	13487	51072	0
	Mo	98	51.511	ug/L	1.204	2	83	533710	0
	Y	89		ug/L			471707	466174	1
	Kr	83		ug/L			167	171	5
>	In	115		ug/L			554281	522012 ✓	1
	Ag	107	49.585	ug/L	0.508	1	139	885154	2
	Cd	111	50.271	ug/L	0.440	0	343	220943	1
	Cd	114	49.808	ug/L	0.633	1	30	507377	1
	Sb	121	46.557	ug/L	0.560	1	158	671616	0
	Sb	123	47.277	ug/L	0.805	1	129	508554	0
	Ba	135	49.286	ug/L	1.310	2	55	161467	1
	Ba	137	50.208	ug/L	1.127	2	86	278499	0
>	Tb	159		ug/L			534474	566204 ✓	0
	Tl	205	52.746	ug/L	0.138	0	174	2182179	1
	Pb	208	50.711	ug/L	0.296	0	823	2816646	1
	Bi	209		ug/L			470644	476597	0
	Th	232	51.612	ug/L	0.854	1	1226	3453944	0
	U	238	52.413	ug/L	0.359	0	165	3844184	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 16:51:48
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	438924 ✓	2
[	Be	9	-0.001	ug/L	0.003	246	3	2	49
	C	13		mg/L			4786	4311	1
	Cl	37		mg/L			2971886	2639065	0
[>	Sc	45		ug/L			393490	365648 ✓	1
[	V	51	-0.020	ug/L	0.007	33	3664	3066	3
[	V-1	51	-0.020	ug/L	0.003	17	1705	1243	5
[	Cr	52	-0.048	ug/L	0.018	37	11009	9492	1
[	Cr	53	-0.046	ug/L	0.016	34	617	489	5
[	Mn	55	0.003	ug/L	0.002	67	588	615	6
[	Co	59	-0.001	ug/L	0.001	129	82	65	22
[>	Ge	72		ug/L			494017	473377 ✓	1
[	Ni	60	-0.004	ug/L	0.001	32	129	106	4
[	Ni	62	-0.031	ug/L	0.021	69	138	114	9
[	Cu	63	-0.014	ug/L	0.002	14	437	291	5
[	Cu	65	0.004	ug/L	0.003	80	143	153	7
[	Zn	66	-0.001	ug/L	0.012	1851	699	668	3
[	Zn	67	-0.013	ug/L	0.045	344	170	156	13
[	Zn	68	-0.447	ug/L	0.066	14	11162	9812	0
[	As	75	-0.022	ug/L	0.012	55	106	41	82
[	As-1	75	-0.206	ug/L	0.103	50	13230	12114	1
[	Se	82	0.005	ug/L	0.009	187	-6	-4	55
[	Se	78	-0.684	ug/L	0.348	50	13487	12419	0
[	Mo	98	0.004	ug/L	0.002	45	83	123	16
	Y	89		ug/L			471707	482378	0
	Kr	83		ug/L			167	157	2
[>	In	115		ug/L			554281	525913 ✓	1
[	Ag	107	0.002	ug/L	0.002	128	139	161	22
[	Cd	111	0.010	ug/L	0.006	61	343	370	8
[	Cd	114	-0.000	ug/L	0.001	9038	30	29	22
[	Sb	121	0.011	ug/L	0.004	37	158	317	19
[	Sb	123	0.011	ug/L	0.008	68	129	245	32
[	Ba	135	0.000	ug/L	0.004	3018	55	53	25
[	Ba	137	0.003	ug/L	0.001	41	86	97	5
[>	Tb	159		ug/L			534474	573842 ✓	0
[	Tl	205	0.002	ug/L	0.001	63	174	277	21
[	Pb	208	0.001	ug/L	0.002	223	823	926	10
[	Bi	209		ug/L			470644	485159	0
[	Th	232	0.026	ug/L	0.010	38	1226	3098	21
[	U	238	0.000	ug/L	0.001	6494	165	177	24

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 F REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, December 06, 2012 16:57:35
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	436447 ✓	2
[	Be	9	0.006	ug/L	0.002	26	3	6	10
	C	13		mg/L			4786	3950	0
	Cl	37		mg/L			2971886	2709379	0
[>	Sc	45		ug/L			393490	380706 ✓	1
[	V	51	0.074	ug/L	0.008	10	3664	4855	2
[	V-1	51	0.101	ug/L	0.008	8	1705	3458	4
[	Cr	52	-0.006	ug/L	0.018	312	11009	10557	2
[	Cr	53	0.079	ug/L	0.020	25	617	746	5
[	Mn	55	3.934	ug/L	0.046	1	588	103456	0
[	Co	59	0.016	ug/L	0.002	10	82	418	6
[>	Ge	72		ug/L			494017	462885 ✓	0
[	Ni	60	u 0.249	ug/L	0.032	12	129	1095	11
[	Ni	62	1.087	ug/L	0.073	6	138	765	5
[	Cu	63	1.275	ug/L	0.026	2	437	11770	1
[	Cu	65	u 0.135	ug/L	0.014	10	143	718	8
[	Zn	66	0.312	ug/L	0.033	10	699	1487	6
[	Zn	67	0.326	ug/L	0.045	13	170	309	5
[	Zn	68	0.117	ug/L	0.023	19	11162	10684	1
[	As	75	0.270	ug/L	0.009	3	106	829	3
[	As-1	75	0.166	ug/L	0.029	17	13230	12839	0
[	Se	82	0.100	ug/L	0.018	17	-6	23	23
[	Se	78	-0.272	ug/L	0.135	49	13487	12441	0
[	Mo	98	3.221	ug/L	0.028	0	83	33223	0
	Y	89		ug/L			471707	484839	2
	Kr	83		ug/L			167	163	1
[>	In	115		ug/L			554281	504428 ✓	0
[	Ag	107	-0.000	ug/L	0.000	10	139	120	0
[	Cd	111	-0.181	ug/L	0.033	18	343	-456	31
[	Cd	114	0.010	ug/L	0.001	10	30	125	8
[	Sb	121	0.213	ug/L	0.004	1	158	3107	2
[	Sb	123	0.215	ug/L	0.002	0	129	2350	0
[	Ba	135	3.653	ug/L	0.051	1	55	11615	1
[	Ba	137	3.778	ug/L	0.046	1	86	20324	0
[>	Tb	159		ug/L			534474	551397 ✓	0
[	Tl	205	0.000	ug/L	0.001	269	174	192	17
[	Pb	208	0.014	ug/L	0.001	11	823	1580	5
[	Bi	209		ug/L			470644	436574	0
[	Th	232	0.021	ug/L	0.003	15	1226	2606	8
[	U	238	0.091	ug/L	0.002	2	165	6645	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 H REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, December 06, 2012 17:03:52
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	483665 ✓	3
[	Be	9	0.009	ug/L	0.006	69	3	9	43
	C	13		mg/L			4786	4050	2
	Cl	37		mg/L			2971886	2783458	1
[>	Sc	45		ug/L			393490	412791 ✓	1
[	V	51	0.054	ug/L	0.010	18	3664	4880	3
[	V-1	51	0.075	ug/L	0.000	0	1705	3243	1
[	Cr	52	0.019	ug/L	0.017	88	11009	11875	2
[	Cr	53	0.083	ug/L	0.016	18	617	818	5
[	Mn	55	3.905	ug/L	0.009	0	588	111384	1
[	Co	59	0.013	ug/L	0.001	8	82	372	8
[>	Ge	72		ug/L			494017	500270 ✓	1
[	Ni	60	U 0.193	ug/L	0.007	3	129	948	3
[	Ni	62	1.342	ug/L	0.046	3	138	989	3
[	Cu	63	1.357	ug/L	0.049	3	437	13505	4
[	Cu	65	U 0.367	ug/L	0.004	1	143	1858	1
[	Zn	66	U 0.309	ug/L	0.013	4	699	1601	3
[	Zn	67	0.303	ug/L	0.030	9	170	322	5
[	Zn	68	-0.287	ug/L	0.060	20	11162	10706	1
[	As	75	U 0.137	ug/L	0.024	17	106	506	14
[	As-1	75	-0.277	ug/L	0.047	16	13230	12600	0
[	Se	82	0.133	ug/L	0.060	45	-6	36	53
[	Se	78	-1.465	ug/L	0.166	11	13487	12520	0
[	Mo	98	2.854	ug/L	0.043	1	83	31821	2
	Y	89		ug/L			471707	513260	2
	Kr	83		ug/L			167	149	5
[>	In	115		ug/L			554281	545353 ✓	1
[	Ag	107	-0.002	ug/L	0.000	23	139	101	7
[	Cd	111	-0.129	ug/L	0.020	15	343	-256	36
[	Cd	114	0.007	ug/L	0.001	14	30	101	11
[	Sb	121	0.217	ug/L	0.007	3	158	3420	1
[	Sb	123	0.209	ug/L	0.006	2	129	2473	1
[	Ba	135	2.269	ug/L	0.017	0	55	7820	1
[	Ba	137	2.324	ug/L	0.046	1	86	13551	0
[>	Tb	159		ug/L			534474	594594 ✓	0
[	Tl	205	-0.002	ug/L	0.000	8	174	105	6
[	Pb	208	0.007	ug/L	0.000	1	823	1326	1
[	Bi	209		ug/L			470644	467093	1
[	Th	232	0.003	ug/L	0.000	14	1226	1549	1
[	U	238	0.036	ug/L	0.001	1	165	2954	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VS66 J REN
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, December 06, 2012 17:10:12
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	510545	0
[	Be	9	0.002	ug/L	0.005	236	3	5	58
	C	13		mg/L			4786	4017	2
	Cl	37		mg/L			2971886	2676284	1
[>	Sc	45		ug/L			393490	424023 ✓	2
[	V	51	0.068	ug/L	0.008	11	3664	5285	2
[	V-1	51	0.058	ug/L	0.004	7	1705	3004	2
[	Cr	52	-0.028	ug/L	0.013	48	11009	11371	0
[	Cr	53	-0.052	ug/L	0.009	18	617	555	2
[	Mn	55	0.162	ug/L	0.008	4	588	5342	3
[	Co	59	0.001	ug/L	0.000	38	82	112	7
[>	Ge	72		ug/L			494017	513929 ✓	0
[	Ni	60	0.009	ug/L	0.005	50	129	174	11
[	Ni	62	0.000	ug/L	0.021	4538	138	144	8
[	Cu	63	0.111	ug/L	0.011	10	437	1548	6
[	Cu	65	0.073	ug/L	0.007	9	143	500	5
[	Zn	66	0.323	ug/L	0.021	6	699	1685	3
[	Zn	67	0.283	ug/L	0.045	15	170	321	6
[	Zn	68	-0.481	ug/L	0.034	6	11162	10583	1
[	As	75	0.118	ug/L	0.003	2	106	465	2
[	As-1	75	-0.443	ug/L	0.056	12	13230	12452	1
[	Se	82	0.018	ug/L	0.017	92	-6	0	978
[	Se	78	-2.146	ug/L	0.212	9	13487	12320	0
[	Mo	98	0.219	ug/L	0.002	0	83	2588	1
	Y	89		ug/L			471707	531866	0
	Kr	83		ug/L			167	148	2
[>	In	115		ug/L			554281	588744 ✓	1
[	Ag	107	-0.002	ug/L	0.000	12	139	102	4
[	Cd	111	-0.000	ug/L	0.004	3396	343	364	6
[	Cd	114	0.001	ug/L	0.001	68	30	44	17
[	Sb	121	0.002	ug/L	0.000	24	158	199	3
[	Sb	123	0.002	ug/L	0.000	7	129	163	2
[	Ba	135	0.138	ug/L	0.011	8	55	567	6
[	Ba	137	0.129	ug/L	0.007	5	86	899	4
[>	Tb	159		ug/L			534474	626281 ✓	1
[	Tl	205	-0.002	ug/L	0.000	24	174	117	18
[	Pb	208	0.037	ug/L	0.002	4	823	3254	2
[	Bi	209		ug/L			470644	525172	1
[	Th	232	0.004	ug/L	0.001	19	1226	1751	3
[	U	238	0.001	ug/L	0.000	7	165	273	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80 C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 17:16:31
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	497867 ✓	0
[	Be	9	0.002	ug/L	0.005	201	3	5	53
	C	13		mg/L			4786	4868	0
	Cl	37		mg/L			2971886	2602243	0
[>	Sc	45		ug/L			393490	419814 ✓	0
[	V	51	0.358	ug/L	0.013	3	3664	10898	2
[	V-1	51	0.363	ug/L	0.006	1	1705	9022	1
[	Cr	52	U 0.109	ug/L	0.005	4	11009	13661	0
[	Cr	53	0.137	ug/L	0.034	25	617	943	6
[	Mn	55	12.428	ug/L	0.232	1	588	359074	1
[	Co	59	0.036	ug/L	0.001	1	82	927	1
[>	Ge	72		ug/L			494017	501833 ✓	0
[	Ni	60	0.601	ug/L	0.017	2	129	2678	1
[	Ni	62	0.442	ug/L	0.032	7	138	421	5
[	Cu	63	1.124	ug/L	0.043	3	437	11298	3
[	Cu	65	1.084	ug/L	0.014	1	143	5222	1
[	Zn	66	1.181	ug/L	0.058	4	699	4127	3
[	Zn	67	1.181	ug/L	0.080	6	170	762	5
[	Zn	68	0.483	ug/L	0.045	9	11162	12348	0
[	As	75	0.477	ug/L	0.011	2	106	1504	2
[	As-1	75	-0.115	ug/L	0.044	38	13230	13107	1
[	Se	82	0.094	ug/L	0.043	45	-6	23	58
[	Se	78	-2.192	ug/L	0.145	6	13487	11994	1
[	Mo	98	0.117	ug/L	0.007	5	83	1384	4
	Y	89		ug/L			471707	518255	0
	Kr	83		ug/L			167	146	5
[>	In	115		ug/L			554281	570554 ✓	0
[	Ag	107	-0.001	ug/L	0.000	65	139	130	6
[	Cd	111	0.009	ug/L	0.005	53	343	396	5
[	Cd	114	0.002	ug/L	0.001	46	30	51	17
[	Sb	121	0.065	ug/L	0.001	1	158	1185	0
[	Sb	123	0.064	ug/L	0.001	1	129	880	1
[	Ba	135	3.604	ug/L	0.071	1	55	12959	1
[	Ba	137	3.667	ug/L	0.081	2	86	22319	1
[>	Tb	159		ug/L			534474	614720 ✓	1
[	Tl	205	-0.001	ug/L	0.000	16	174	147	4
[	Pb	208	0.110	ug/L	0.004	3	823	7583	1
[	Bi	209		ug/L			470644	516423	1
[	Th	232	-0.006	ug/L	0.000	8	1226	1005	4
[	U	238	0.007	ug/L	0.000	3	165	752	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT79 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 17:22:51
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			415979	390840 ✓	2
[	Be	9	0.014		ug/L	0.002	12	3	9	7
	C	13			mg/L			4786	5032	1
	Cl	37			mg/L			2971886	2335110	0
[>	Sc	45			ug/L			393490	350448 ✓	1
[	V	51	0.678		ug/L	0.017	2	3664	14300	2
[	V-1	51	0.709		ug/L	0.015	2	1705	13255	2
[	Cr	52	0.273	U	ug/L	0.027	10	11009	13808	1
[	Cr	53	0.389		ug/L	0.021	5	617	1226	1
[	Mn	55	4.791		ug/L	0.129	2	588	115869	2
[	Co	59	0.119		ug/L	0.002	1	82	2394	1
[>	Ge	72			ug/L			494017	410737 ✓	1
[	Ni	60	0.679		ug/L	0.012	1	129	2461	0
[	Ni	62	0.489		ug/L	0.027	5	138	369	4
[	Cu	63	0.478		ug/L	0.016	3	437	4143	3
[	Cu	65	0.456		ug/L	0.014	3	143	1867	2
[	Zn	66	2.979	U	ug/L	0.046	1	699	7639	0
[	Zn	67	2.826		ug/L	0.216	7	170	1296	5
[	Zn	68	3.077		ug/L	0.109	3	11162	14543	1
[	As	75	0.291		ug/L	0.017	5	106	786	6
[	As-1	75	0.284		ug/L	0.080	28	13230	11669	0
[	Se	82	0.051		ug/L	0.024	47	-6	8	77
[	Se	78	0.074		ug/L	0.354	478	13487	11258	0
[	Mo	98	0.023		ug/L	0.003	13	83	283	10
	Y	89			ug/L			471707	420919	1
	Kr	83			ug/L			167	155	6
[>	In	115			ug/L			554281	454880 ✓	0
[	Ag	107	-0.001		ug/L	0.001	76	139	103	8
[	Cd	111	0.013	U	ug/L	0.005	41	343	331	5
[	Cd	114	0.013		ug/L	0.002	13	30	145	11
[	Sb	121	0.017		ug/L	0.001	6	158	342	3
[	Sb	123	0.019		ug/L	0.002	10	129	288	6
[	Ba	135	4.453		ug/L	0.102	2	55	12756	1
[	Ba	137	4.586		ug/L	0.182	3	86	22234	3
[>	Tb	159			ug/L			534474	509643 ✓	1
[	Tl	205	-0.000		ug/L	0.000	155	174	158	7
[	Pb	208	0.065	U	ug/L	0.002	3	823	4054	1
[	Bi	209			ug/L			470644	426183	0
[	Th	232	0.010		ug/L	0.001	12	1226	1777	2
[	U	238	0.006		ug/L	0.000	1	165	521	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT79 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 17:29:10
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean		Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6			ug/L			415979	398176 ✓	1
[	Be	9	0.012		ug/L	0.017	137	3	9	90
	C	13			mg/L			4786	5335	1
	Cl	37			mg/L			2971886	2344849	0
[>	Sc	45			ug/L			393490	367290 ✓	1
[	V	51	0.662		ug/L	0.016	2	3664	14716	0
[	V-1	51	0.699		ug/L	0.017	2	1705	13707	1
[	Cr	52	0.236	U	ug/L	0.012	4	11009	13899	1
[	Cr	53	0.368		ug/L	0.032	8	617	1248	5
[	Mn	55	4.289		ug/L	0.127	2	588	108759	2
[	Co	59	0.107		ug/L	0.004	4	82	2261	2
[>	Ge	72			ug/L			494017	422212 ✓	1
[	Ni	60	0.716		ug/L	0.012	1	129	2663	2
[	Ni	62	0.467		ug/L	0.044	9	138	367	6
[	Cu	63	0.504		ug/L	0.010	1	437	4464	1
[	Cu	65	0.481		ug/L	0.002	0	143	2020	1
[	Zn	66	3.136	U	ug/L	0.091	2	699	8234	1
[	Zn	67	2.898		ug/L	0.121	4	170	1363	3
[	Zn	68	3.168		ug/L	0.153	4	11162	15108	1
[	As	75	0.284	BA 12/7/12	ug/L	0.010	3	106	789	3
[	As-1	75	0.185		ug/L	0.062	33	13230	11755	0
[	Se	82	0.106		ug/L	0.046	43	-6	23	54
[	Se	78	-0.282		ug/L	0.235	83	13487	11340	0
[	Mo	98	0.023		ug/L	0.004	17	83	284	12
	Y	89			ug/L			471707	430325	0
	Kr	83			ug/L			167	139	5
[>	In	115			ug/L			554281	473893 ✓	0
[	Ag	107	-0.002		ug/L	0.001	38	139	93	9
[	Cd	111	0.010	U	ug/L	0.009	95	343	332	11
[	Cd	114	0.013		ug/L	0.001	5	30	145	5
[	Sb	121	0.018		ug/L	0.004	20	158	368	12
[	Sb	123	0.019		ug/L	0.001	3	129	296	2
[	Ba	135	4.512		ug/L	0.090	2	55	13466	1
[	Ba	137	4.576		ug/L	0.035	0	86	23115	0
[>	Tb	159			ug/L			534474	522945 ✓	0
[	Tl	205	-0.001		ug/L	0.000	22	174	121	9
[	Pb	208	0.063	U	ug/L	0.001	1	823	4049	0
[	Bi	209			ug/L			470644	438474	0
[	Th	232	0.006		ug/L	0.001	9	1226	1594	3
[	U	238	0.005		ug/L	0.001	11	165	477	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT79 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 17:35:29
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

RR Zn

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	402223 ✓	1
[	Be	9	23.852	ug/L	0.351	1	3	11409	0
	C	13		mg/L			4786	5085	1
	Cl	37		mg/L			2971886	2342012	0
[>	Sc	45		ug/L			393490	365768 ✓	2
[	V	51	22.543	ug/L	0.803	3	3664	386348	2
[	V-1	51	22.753	ug/L	0.770	3	1705	394392	2
[	Cr	52	22.148	ug/L	0.552	2	11009	348802	0
[	Cr	53	22.806	ug/L	0.525	2	617	41987	0
[	Mn	55	28.403	ug/L	1.185	4	588	713818	1
[	Co	59	22.269	ug/L	0.398	1	82	451623	2
[>	Ge	72		ug/L			494017	430105 ✓	1
[	Ni	60	27.200	ug/L	0.883	3	129	98859	2
[	Ni	62	26.598	ug/L	0.361	1	138	14581	0
[	Cu	63	28.333	ug/L	0.198	0	437	234905	0
[	Cu	65	27.518	ug/L	0.542	1	143	110562	0
[	Zn	66	166.261	ug/L	0.780	0	699	413114	0
[	Zn	67	145.972	ug/L	1.431	0	170	62639	0
[	Zn	68	160.889	ug/L	1.553	0	11162	297923	0
[	As	75	26.694	ug/L	0.392	1	106	66993	0
[	As-1	75	25.083	ug/L	0.480	1	13230	73649	0
[	Se	82	83.986	ug/L	1.881	2	-6	22994	1
[	Se	78	80.500	ug/L	2.311	2	13487	65424	1
[	Mo	98	0.041	ug/L	0.003	6	83	467	5
	Y	89		ug/L			471707	438202	0
	Kr	83		ug/L			167	155	5
[>	In	115		ug/L			554281	472366 ✓	0
[	Ag	107	25.284	ug/L	0.309	1	139	408430	1
[	Cd	111	24.416	ug/L	0.430	1	343	97252	1
[	Cd	114	24.286	ug/L	0.352	1	30	223874	0
[	Sb	121	0.019	ug/L	0.002	11	158	389	8
[	Sb	123	0.021	ug/L	0.000	2	129	318	0
[	Ba	135	30.216	ug/L	0.181	0	55	89617	0
[	Ba	137	30.540	ug/L	0.207	0	86	153353	0
[>	Tb	159		ug/L			534474	525550 ✓	1
[	Tl	205	25.325	ug/L	0.197	0	174	972541	0
[	Pb	208	25.864	ug/L	0.348	1	823	1333621	0
[	Bi	209		ug/L			470644	442960	0
[	Th	232	24.875	ug/L	0.274	1	1226	1545831	0
[	U	238	24.502	ug/L	0.567	2	165	1667903	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT81 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 17:41:48
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	397168 ✓	2
[	Be	9	0.013	ug/L	0.006	46	3	9	32
	C	13		mg/L			4786	5481	2
	Cl	37		mg/L			2971886	3159893	1
[>	Sc	45		ug/L			393490	350032 ✓	2
[	V	51	1.821	ug/L	0.042	2	3664	32862	0
[	V-1	51	2.247	ug/L	0.052	2	1705	38641	0
[	Cr	52	0.288	ug/L	0.032	11	11009	13994	1
[	Cr	53	1.658	ug/L	0.093	5	617	3429	3
[	Mn	55	19.066	ug/L	0.560	2	588	458888	2
[	Co	59	0.454	ug/L	0.010	2	82	8881	0
[>	Ge	72		ug/L			494017	425285 ✓	0
[	Ni	60	2.252	ug/L	0.072	3	129	8199	3
[	Ni	62	3.428	ug/L	0.232	6	138	1962	6
[	Cu	63	53.992	ug/L	0.507	0	437	442296	0
[	Cu	65	52.455	ug/L	0.972	1	143	208307	1
[	Zn	66	57.700	ug/L	0.607	1	699	142159	0
[	Zn	67	49.710	ug/L	0.248	0	170	21190	0
[	Zn	68	54.105	ug/L	0.148	0	11162	105449	0
[	As	75	0.658	ug/L	0.011	1	106	1723	1
[	As-1	75	0.475	ug/L	0.064	13	13230	12552	1
[	Se	82	0.592	ug/L	0.021	3	-6	154	3
[	Se	78	-0.055	ug/L	0.217	391	13487	11574	1
[	Mo	98	0.277	ug/L	0.007	2	83	2695	2
	Y	89		ug/L			471707	444593	0
	Kr	83		ug/L			167	153	7
[>	In	115		ug/L			554281	463545 ✓	0
[	Ag	107	0.013	ug/L	0.003	23	139	315	14
[	Cd	111	0.002	ug/L	0.013	513	343	296	16
[	Cd	114	0.050	ug/L	0.002	3	30	482	2
[	Sb	121	0.327	ug/L	0.006	1	158	4321	1
[	Sb	123	0.322	ug/L	0.004	1	129	3187	0
[	Ba	135	3.545	ug/L	0.045	1	55	10359	1
[	Ba	137	3.583	ug/L	0.069	1	86	17720	1
[>	Tb	159		ug/L			534474	514341 ✓	0
[	Tl	205	0.002	ug/L	0.001	47	174	224	11
[	Pb	208	1.657	ug/L	0.015	0	823	84356	0
[	Bi	209		ug/L			470644	415238	1
[	Th	232	0.039	ug/L	0.012	30	1226	3553	19
[	U	238	0.037	ug/L	0.001	2	165	2615	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT81 MBSPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, December 06, 2012 17:48:05
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	412380 ✓	1
[	Be	9	23.228	ug/L	0.067	0	3	11393	1
	C	13		mg/L			4786	4740	1
	Cl	37		mg/L			2971886	2392249	0
[>	Sc	45		ug/L			393490	323867 ✓	0
[	V	51	23.733	ug/L	0.203	0	3664	360166	1
[	V-1	51	23.921	ug/L	0.196	0	1705	367240	1
[	Cr	52	24.043	ug/L	0.128	0	11009	334644	0
[	Cr	53	24.599	ug/L	0.255	1	617	40077	0
[	Mn	55	24.929	ug/L	0.450	1	588	555160	1
[	Co	59	24.441	ug/L	0.594	2	82	438939	1
[>	Ge	72		ug/L			494017	430021 ✓	0
[	Ni	60	26.274	ug/L	0.661	2	129	95490	1
[	Ni	62	26.295	ug/L	0.772	2	138	14413	2
[	Cu	63	26.604	ug/L	0.832	3	437	220530	2
[	Cu	65	25.949	ug/L	0.709	2	143	104257	2
[	Zn	66	80.569	ug/L	0.781	0	699	200468	0
[	Zn	67	72.851	ug/L	1.360	1	170	31328	1
[	Zn	68	77.228	ug/L	0.430	0	11162	148042	1
[	As	75	25.788	ug/L	0.516	1	106	64710	1
[	As-1	75	24.453	ug/L	0.429	1	13230	72080	0
[	Se	82	83.125	ug/L	1.819	2	-6	22755	1
[	Se	78	80.664	ug/L	1.423	1	13487	65528	0
[	Mo	98	0.001	ug/L	0.000	78	83	77	5
	Y	89		ug/L			471707	428114	0
	Kr	83		ug/L			167	154	4
[>	In	115		ug/L			554281	473662 ✓	0
[	Ag	107	24.947	ug/L	0.345	1	139	404099	1
[	Cd	111	24.052	ug/L	0.267	1	343	96076	0
[	Cd	114	23.786	ug/L	0.343	1	30	219879	0
[	Sb	121	-0.004	ug/L	0.001	26	158	81	17
[	Sb	123	-0.006	ug/L	0.001	18	129	49	22
[	Ba	135	24.999	ug/L	0.241	0	55	74360	1
[	Ba	137	25.213	ug/L	0.248	0	86	126965	0
[>	Tb	159		ug/L			534474	530386 ✓	0
[	Tl	205	24.678	ug/L	0.311	1	174	956451	1
[	Pb	208	25.302	ug/L	0.198	0	823	1316798	0
[	Bi	209		ug/L			470644	448956	0
[	Th	232	24.075	ug/L	0.074	0	1226	1509998	0
[	U	238	23.735	ug/L	0.214	0	165	1630812	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT06 MB1SPK SWN
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, December 06, 2012 17:54:22
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

Del
RR SC
BA 12/7/12

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	396247 ✓	0
[	Be	9	24.109	ug/L	0.207	0	3	11362	0
	C	13		mg/L			4786	4191	1
	Cl	37		mg/L			2971886	2407956	0
[>	Sc	45		ug/L			393490	313942 ✓	1
[	V	51	24.691	ug/L	0.157	0	3664	363111	1
[	V-1	51	24.860	ug/L	0.112	0	1705	369904	1
[	Cr	52	24.818	ug/L	0.666	2	11009	334632	3
[	Cr	53	25.327	ug/L	0.015	0	617	39985	1
[	Mn	55	25.766	ug/L	0.235	0	588	556194	0
[	Co	59	25.245	ug/L	0.149	0	82	439518	0
[>	Ge	72		ug/L			494017	421195 ✓	1
[	Ni	60	26.648	ug/L	0.670	2	129	94852	1
[	Ni	62	26.599	ug/L	0.250	0	138	14280	0
[	Cu	63	26.921	ug/L	0.235	0	437	218591	1
[	Cu	65	26.495	ug/L	0.140	0	143	104267	1
[	Zn	66	83.674	ug/L	1.550	1	699	203877	0
[	Zn	67	75.557	ug/L	1.604	2	170	31819	1
[	Zn	68	80.763	ug/L	0.395	0	11162	151199	0
[	As	75	27.205	ug/L	0.401	1	106	66861	0
[	As-1	75	25.539	ug/L	0.359	1	13230	73236	0
[	Se	82	87.745	ug/L	1.463	1	-6	23526	0
[	Se	78	84.196	ug/L	1.155	1	13487	66489	0
[	Mo	98	0.000	ug/L	0.001	196	83	75	11
	Y	89		ug/L			471707	421902	0
	Kr	83		ug/L			167	151	7
[>	In	115		ug/L			554281	457936 ✓	1
[	Ag	107	25.968	ug/L	0.171	0	139	406653	1
[	Cd	111	24.835	ug/L	0.212	0	343	95898	1
[	Cd	114	24.808	ug/L	0.398	1	30	221701	1
[	Sb	121	-0.006	ug/L	0.000	7	158	60	7
[	Sb	123	-0.008	ug/L	0.001	8	129	31	18
[	Ba	135	25.775	ug/L	0.296	1	55	74111	0
[	Ba	137	26.215	ug/L	0.628	2	86	127594	0
[>	Tb	159		ug/L			534474	518515 ✓	0
[	Tl	205	25.351	ug/L	0.185	0	174	960584	1
[	Pb	208	25.998	ug/L	0.143	0	823	1322698	0
[	Bi	209		ug/L			470644	440427	0
[	Th	232	24.605	ug/L	0.283	1	1226	1508603	0
[	U	238	24.195	ug/L	0.453	1	165	1625175	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 18:00:39
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	376463 ✓	1
[	Be	9	50.481	ug/L	0.768	1	3	22597	0
	C	13		mg/L			4786	3457	1
	Cl	37		mg/L			2971886	2414569	0
[>	Sc	45		ug/L			393490	309190 ✓	2
[	V	51	48.615	ug/L	0.957	1	3664	701103	1
[	V-1	51	49.047	ug/L	1.101	2	1705	717213	1
[	Cr	52	48.794	ug/L	0.416	0	11009	639399	1
[	Cr	53	50.099	ug/L	0.875	1	617	77404	1
[	Mn	55	50.709	ug/L	1.075	2	588	1077411	1
[	Co	59	49.980	ug/L	1.319	2	82	856787	2
[>	Ge	72		ug/L			494017	422841 ✓	1
[	Ni	60	51.064	ug/L	1.424	2	129	182371	1
[	Ni	62	51.512	ug/L	0.555	1	138	27655	1
[	Cu	63	50.337	ug/L	0.776	1	437	409962	0
[	Cu	65	49.571	ug/L	0.654	1	143	195715	0
[	Zn	66	50.965	ug/L	0.278	0	699	124920	1
[	Zn	67	50.846	ug/L	0.348	0	170	21547	1
[	Zn	68	49.495	ug/L	0.429	0	11162	96725	1
[	As	75	50.322	ug/L	0.461	0	106	124088	1
[	As-1	75	49.855	ug/L	0.513	1	13230	132749	1
[	Se	82	53.797	ug/L	1.381	2	-6	14478	1
[	Se	78	52.299	ug/L	0.964	1	13487	45834	0
[	Mo	98	49.933	ug/L	0.388	0	83	469442	1
	Y	89		ug/L			471707	417823	0
	Kr	83		ug/L			167	170	2
[>	In	115		ug/L			554281	455389 ✓	1
[	Ag	107	50.008	ug/L	1.390	2	139	778454	1
[	Cd	111	50.417	ug/L	1.118	2	343	193272	0
[	Cd	114	50.167	ug/L	0.720	1	30	445774	0
[	Sb	121	48.243	ug/L	0.758	1	158	607074	0
[	Sb	123	48.931	ug/L	0.674	1	129	459182	0
[	Ba	135	50.777	ug/L	0.696	1	55	145145	1
[	Ba	137	51.072	ug/L	0.806	1	86	247154	0
[>	Tb	159		ug/L			534474	503734 ✓	0
[	Tl	205	49.594	ug/L	0.657	1	174	1825333	0
[	Pb	208	49.830	ug/L	0.474	0	823	2462304	1
[	Bi	209		ug/L			470644	415978	0
[	Th	232	51.312	ug/L	0.134	0	1226	3055349	0
[	U	238	51.568	ug/L	0.390	0	165	3365142	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, December 06, 2012 18:07:17
Number of Replicates: 3
Method File: C:\Elandata\Method\2008LoNoMinNoRh.mth
Tuning File: C:\Elandata\Tuning\default.tun
Optimization File: C:\Elandata\Optimize\default.dac
Calibration File: C:\Elandata\Calibration\120612.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
[>	Li	6		ug/L			415979	387468 ✓	0
[	Be	9	0.006	ug/L	0.002	25	3	5	12
	C	13		mg/L			4786	4127	0
	Cl	37		mg/L			2971886	2496810	0
[>	Sc	45		ug/L			393490	319519 ✓	1
[	V	51	-0.008	ug/L	0.011	138	3664	2851	5
[	V-1	51	0.002	ug/L	0.005	231	1705	1416	4
[	Cr	52	-0.038	ug/L	0.011	29	11009	8438	2
[	Cr	53	-0.004	ug/L	0.024	548	617	494	8
[	Mn	55	-0.001	ug/L	0.001	169	588	463	5
[	Co	59	-0.001	ug/L	0.000	64	82	56	13
[>	Ge	72		ug/L			494017	432149 ✓	0
[	Ni	60	-0.003	ug/L	0.004	148	129	103	14
[	Ni	62	-0.052	ug/L	0.009	16	138	92	4
[	Cu	63	-0.014	ug/L	0.002	14	437	264	7
[	Cu	65	-0.002	ug/L	0.005	253	143	118	15
[	Zn	66	-0.003	ug/L	0.021	678	699	603	8
[	Zn	67	-0.052	ug/L	0.007	13	170	126	1
[	Zn	68	-0.122	ug/L	0.086	70	11162	9543	1
[	As	75	0.012	ug/L	0.005	45	106	123	10
[	As-1	75	0.079	ug/L	0.067	84	13230	11769	0
[	Se	82	0.020	ug/L	0.045	225	-6	0	336596
[	Se	78	0.304	ug/L	0.233	76	13487	12001	0
[	Mo	98	0.004	ug/L	0.003	83	83	112	29
	Y	89		ug/L			471707	432547	0
	Kr	83		ug/L			167	156	4
[>	In	115		ug/L			554281	474776 ✓	0
[	Ag	107	0.002	ug/L	0.001	77	139	143	13
[	Cd	111	0.004	ug/L	0.007	185	343	309	8
[	Cd	114	-0.000	ug/L	0.000	142	30	23	17
[	Sb	121	0.009	ug/L	0.003	30	158	258	15
[	Sb	123	0.009	ug/L	0.008	87	129	202	40
[	Ba	135	-0.000	ug/L	0.002	811	55	47	13
[	Ba	137	0.002	ug/L	0.002	120	86	82	13
[>	Tb	159		ug/L			534474	515065 ✓	0
[	Tl	205	0.003	ug/L	0.001	56	174	262	21
[	Pb	208	0.001	ug/L	0.002	178	823	843	11
[	Bi	209		ug/L			470644	433845	1
[	Th	232	0.023	ug/L	0.008	34	1226	2579	19
[	U	238	-0.000	ug/L	0.001	412	165	150	25

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 12-7-12 **Analyst:** ~~M~~ **Page:** 1 of 7

All corrections made by analyst unless otherwise noted. ~~M~~ 12-~~7~~-12

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		STD 0			2995-10
		1			~~2994-16~~ 2990-12
		2			~~2995-1~~ 2994-16
		3			2995-1
		4			~~2997-1~~
		5			2995-2
		Rinse Sample			
		ICV			2926-7
		ICB			
		CCV1			
		CCB1			
227		ZZZZZZ			No sample in place
7					
		Loco check			
		ICSA			cd 0.2
		ICSAB			
		LR200			
		LR300			
		B1			^{62}Ni Sb C.O.
		CCV2			
		CCB2			Th high
		VBOR MB1	REN	2	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 81DN1050201

Analysis Date: 12-7-12 **Analyst:** M **Page:** 2 of 7

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		VR80R ADup	REN	2	✓
		A			
		Aspl			✓
		EDup			✓
		E			
		Espl			✓
VR80R		B			
		C			
		MBlspl			✓
		CCV3			
		CCB3			
		VR80R MB2	REN	2	
		VT87 MB1			
		VR80R D			
		F			
		G			
VR80R		H			
		VT87 ADup			✓
		A			
		Aspl			✓
		VR80R MB2spl			✓
		CCV4			
		CCB4			
		VR61 MB1	REN	2	~~1+0~~ 12-10

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA

Analysis Date: 12-7-12

Vorion M2	Analyst HJ 12-10-12	Peer QA 12-10-12	Comment
Logbook:			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration:			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration Verification:			
ICV/CCV	✓	✓	See log
ICB/CCB	✓	✓	b
Samples:			
RSD's & SD's	✓	✓	
Internal Standards	✓	✓	
Carry-over	✓	✓	
Method QC:			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	✓	See log
Post Spikes/Serial Dilutions	✓	✓	
Analytic Spikes	—	—	
Matrix QC:			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	VT96
Matrix Duplicates	✓	✓	VT96 VT41
Method Blanks	✓	✓	VV30
Data Distribution:			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Necessary Analysts Notes and CAF's:	✓	✓	CAF VV30 VT96 VT41

Daily Performance Report

Sample ID: Daily Performance Check
Sample Date/Time: Friday, December 07, 2012 09:02:26
Sample Description:
Method File. C:\NexIONData\Method\Daily Performancenew.mth
Dataset File: C:\NexIONData\Dataset\Default\Daily Performance Check.1350
MassCal File: C:\NexIONData\MassCal\Default.tun
Conditions File: C:\NexIONData\Conditions\Default.dac
Dual Detector Mode: Pulse

Acq. Dead Time (ns): 60
Current Dead Time (ns): 60

Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	6177.3	6177.289	98.456	1.6	Standard
	Mg	24.0	43093.2	43093.151	597.527	1.4	Standard
	In	114.9	77168.8	77168.796	418.368	0.5	Standard
	Pb	208.0	33317.3	33317.272	231.854	0.7	Standard
	U	238.1	58538.6	58538.624	295.642	0.5	Standard
⌈	CeO	155.9	1729.1	0.024	0.001	3.9	Standard
| >	Ce	139.9	73455.3	73455.267	536.621	0.7	Standard
⌊	Ce++	70.0	1528.5	0.021	0.000	1.6	Standard
	Bkgd	220.0	0.0	0.000	0.000		Standard

Current Conditions File Data

Current Value	Description
1.07	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
18.00	Plasma Gas Flow
-12.00	Deflector Voltage
1600.00	ICP RF Power
-1675.00	Analog Stage Voltage
1300.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-15.00	Cell Rod Offset STD [CRO]
7.00	Discriminator Threshold
-4.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.25	RPq
1.06	DRC Mode NEB
-8.00	DRC Mode QRO
-2.50	DRC Mode CRO
-4.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
250.00	Axial Field Voltage
-15.00	KED Mode CRO
-12.00	KED Mode QRO
-2.00	KED Mode Cell Entrance Voltage
-24.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
4.00	KED Cell Gas B

SmartTune Wizard - Details

timization Details

artTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

timization Status

art Time: 12/7/2012 9:02:24 AM

ily Performance Check

Optimization Settings:

Method: C:\NexIONData\Method\Daily Performancenew.mth.
Intensity Criterion: Be 9.0122 > 3000
Intensity Criterion: Mg 23.985 > 20000
Intensity Criterion: In 114.904 > 50000
Intensity Criterion: Pb 207.977 > 20000
Intensity Criterion: U 238.05 > 40000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: CeO 155.9 / Ce 139.905 <= 0.025
Formula Criterion: Ce++ 69.9527 / Ce 139.905 <= 0.03

Optimization Results:

Initial Try

Obtained Intensity (Be 9.0122): 6177.29
Obtained Intensity (Mg 23.985): 43093.15
Obtained Intensity (In 114.904): 77168.80
Obtained Intensity (Pb 207.977): 33317.27
Obtained Intensity (U 238.05): 58538.62
Obtained Intensity (Bkgd 220): 0.00
Obtained Formula (CeO 155.9 / Ce 139.905): 0.024 (=1729.11 / 73455.27)
Obtained Formula (Ce++ 69.9527 / Ce 139.905): 0.021 (=1528.47 / 73455.27)

assed] Optimum value(s): N/A

d Time: 12/7/2012 9:05:00 AM

SmartTune Wizard - Details

imization Details

rtTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

imization Status

rt Time: 12/7/2012 8:58:06 AM

oLens STD/DRC

Optimization Settings:

Method: AutoLens Calibration.mth.

Initial Try - Start/End/Step: -20/0/0.5.

Criteria:

Min.Correlation Coefficient: 0.985

Min.Intercept: -20.00

Optimization Results:

Initial Try

ssed] Optimum value(s): Correlation Coefficient = 0.999; Intercept = -12.48

Analyte	Mass	Points	DAC	MaxIntensity
Li	7.016	41	-12.5	2752.45
Mg	23.985	41	-12.5	45224.4
In	114.904	41	-8.5	78901.8
Ce	139.905	41	-7.5	73254.6
Pb	207.977	41	-4.5	32452.1
U	238.05	41	-4	57742.4

Time: 12/7/2012 9:02:17 AM

SmartTune Wizard - Details

timization Details

artTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

timization Status

art Time: 12/7/2012 8:55:48 AM

ss Calibration and Resolution

Optimization Settings:

Method: Tuning.mth.
MassCal File: Default.tun
Iterations: 6
Target accuracy (+/- amu): 0.1 for Mass Cal. and 0.03 for Resolution
Peak height (%) for Res. Opt.: 10

Optimization Results:

Initial Try

Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.699)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.713)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.702)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.708)

assed] Optimum value(s): N/A

d Time: 12/7/2012 8:58:00 AM

SmartTune Wizard - Summary

:imization Summary

irtTune file: C:\NexIONData\Wizard\SmartTune\ariSTDaily+torch.swz

irt Time: 12/7/2012 8:54:41 AM
i Time: 12/7/2012 8:55:37 AM

rch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.58 mm	0.79 mm	73960.76

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Blank
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 09:35:52
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens RSD
>	Li	6		ug/L				1864378	1
	Be	9		ug/L				14	20
	C	13		ug/L				127762	2
	Cl	37		ug/L				4732762	1
>	Sc	45		ug/L				1351908	0
	V	51		ug/L				9535	0
	V-1	51		ug/L				76	20
	Cr	52		ug/L				28286	0
	Cr	53		ug/L				171	2
	Mn	55		ug/L				673	3
	Co	59		ug/L				47	19
>	Ge	72		ug/L				685770	1
	Ni	60		ug/L				17	6
	Ni	62		ug/L				137	7
	Cu	63		ug/L				147	7
	Cu	65		ug/L				44	8
	Zn	66		ug/L				266	7
	Zn	67		ug/L				39	21
	Zn	68		ug/L				255	2
	As	75		ug/L				158	19
	As-1	75		ug/L				9961	0
	Se	82		ug/L				8	126
	Se	78		ug/L				10147	0
	Mo	98		ug/L				10	27
	Y	89		ug/L				476646	0
	Kr	83		ug/L				449	5
>	In	115		ug/L				953484	1
	Ag	107		ug/L				13	15
	Cd	111		ug/L				88	8
	Cd	114		ug/L				30	10
	Sb	121		ug/L				44	11
	Sb	123		ug/L				34	4
	Ba	135		ug/L				12	30
	Ba	137		ug/L				27	38
>	Tb	159		ug/L				1136829	0
	Tl	205		ug/L				37	6
	Pb	208		ug/L				262	5
	Bi	209		ug/L				2635860	0
	Th	232		ug/L				82	18
	U	238		ug/L				3	83

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 09:40:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1900644	0
	Be	9	0.200	ug/L	0.004	2	14	972	1
	C	13		ug/L			127762	128213	0
	Cl	37		ug/L			4732762	4714958	2
>	Sc	45		ug/L			1351908	1371177	1
	V	51	0.200	ug/L	0.021	10	9535	14900	2
	V-1	51	0.200	ug/L	0.004	2	76	5541	0
	Cr	52	0.500	ug/L	0.066	13	28286	39091	2
	Cr	53	0.500	ug/L	0.010	1	171	1424	1
	Mn	55	0.500	ug/L	0.005	0	673	15670	0
	Co	59	0.200	ug/L	0.007	3	47	4336	2
>	Ge	72		ug/L			685770	681189	1
	Ni	60	0.500	ug/L	0.034	6	17	2256	5
	Ni	62	0.500	ug/L	0.020	4	137	463	3
	Cu	63	0.500	ug/L	0.019	3	147	5234	2
	Cu	65	0.500	ug/L	0.015	2	44	2279	1
	Zn	66	4.000	ug/L	0.185	4	266	12493	2
	Zn	67	4.000	ug/L	0.065	1	39	1848	3
	Zn	68	4.000	ug/L	0.135	3	255	8467	2
	As	75	0.200	ug/L	0.008	4	158	646	2
	As-1	75	0.200	ug/L	0.070	35	9961	10369	0
	Se	82	0.500	ug/L	0.051	10	8	150	9
	Se	78	0.500	ug/L	0.234	46	10147	10421	0
	Mo	98	0.200	ug/L	0.003	1	10	1041	3
	Y	89		ug/L			476646	468729	0
	Kr	83		ug/L			449	441	3
>	In	115		ug/L			953484	935816	0
	Ag	107	0.200	ug/L	0.005	2	13	1931	2
	Cd	111	0.100	ug/L	0.005	4	88	559	3
	Cd	114	0.100	ug/L	0.005	4	30	1210	4
	Sb	121	0.200	ug/L	0.006	3	44	2557	2
	Sb	123	0.200	ug/L	0.002	1	34	1924	1
	Ba	135	0.500	ug/L	0.017	3	12	1948	3
	Ba	137	0.500	ug/L	0.005	0	27	3476	0
>	Tb	159		ug/L			1136829	1119738	0
	Tl	205	0.200	ug/L	0.004	1	37	7142	1
	Pb	208	0.100	ug/L	0.000	0	262	5162	0
	Bi	209		ug/L			2635860	2613650	0
	Th	232	0.200	ug/L	0.024	12	82	5825	11
	U	238	0.200	ug/L	0.003	1	3	8917	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 09:44:10
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens. RSD
>	Li	6		ug/L			1864378	1882051	1
	Be	9	10.000	ug/L	0.174	1	14	48092	1
	C	13		ug/L			127762	129533	3
	Cl	37		ug/L			4732762	4905768	2
>	Sc	45		ug/L			1351908	1401001	2
	V	51	10.000	ug/L	0.385	3	9535	268035	1
	V-1	51	10.000	ug/L	0.301	3	76	259819	0
	Cr	52	10.001	ug/L	0.312	3	28286	248804	1
	Cr	53	10.000	ug/L	0.071	0	171	25487	1
	Mn	55	10.000	ug/L	0.297	2	673	303784	2
	Co	59	10.000	ug/L	0.310	3	47	211066	1
>	Ge	72		ug/L			685770	695669	0
	Ni	60	9.999	ug/L	0.106	1	17	44864	0
	Ni	62	9.999	ug/L	0.197	1	137	6484	1
	Cu	63	10.000	ug/L	0.089	0	147	102096	1
	Cu	65	9.999	ug/L	0.179	1	44	44626	1
	Zn	66	9.860	ug/L	0.288	2	266	28583	2
	Zn	67	9.989	ug/L	0.121	1	39	4622	1
	Zn	68	9.953	ug/L	0.321	3	255	20542	3
	As	75	10.000	ug/L	0.112	1	158	23359	0
	As-1	75	10.000	ug/L	0.076	0	9961	33228	0
	Se	82	9.998	ug/L	0.208	2	8	2740	1
	Se	78	9.999	ug/L	0.200	1	10147	17150	0
	Mo	98	10.000	ug/L	0.101	1	10	53567	0
	Y	89		ug/L			476646	476587	1
	Kr	83		ug/L			449	451	3
>	In	115		ug/L			953484	965989	0
	Ag	107	10.000	ug/L	0.063	0	13	96033	1
	Cd	111	10.000	ug/L	0.064	0	88	47024	1
	Cd	114	10.000	ug/L	0.154	1	30	117890	1
	Sb	121	10.000	ug/L	0.074	0	44	131900	1
	Sb	123	10.000	ug/L	0.062	0	34	99235	0
	Ba	135	10.000	ug/L	0 085	0	12	40519	0
	Ba	137	9.999	ug/L	0.145	1	27	68735	0
>	Tb	159		ug/L			1136829	1147996	0
	Tl	205	10.000	ug/L	0.048	0	37	351275	0
	Pb	208	10.000	ug/L	0.126	1	262	460764	0
	Bi	209		ug/L			2635860	2646316	0
	Th	232	10.001	ug/L	0.096	0	82	397594	0
	U	238	10.000	ug/L	0.093	0	3	446374	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 09:48:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens RSD
>	Li	6		ug/L			1864378	1859300	3
	Be	9	20.034	ug/L	0.911	4	14	95730	1
	C	13		ug/L			127762	127750	3
	Cl	37		ug/L			4732762	5039837	1
>	Sc	45		ug/L			1351908	1369719	1
	V	51	20.152	ug/L	0.496	2	9535	534321	0
	V-1	51	20.130	ug/L	0.708	3	76	525004	1
	Cr	52	20.124	ug/L	0.268	1	28286	471626	1
	Cr	53	20.054	ug/L	0.741	3	171	50314	2
	Mn	55	20.106	ug/L	0.309	1	673	609553	2
	Co	59	20.080	ug/L	0.527	2	47	421147	1
>	Ge	72		ug/L			685770	683696	2
	Ni	60	20.016	ug/L	0.500	2	17	88514	2
	Ni	62	19.964	ug/L	0.550	2	137	12494	1
	Cu	63	19.967	ug/L	0.447	2	147	198822	0
	Cu	65	20.030	ug/L	0.975	4	44	88268	2
	Zn	66	19.928	ug/L	0.552	2	266	55800	0
	Zn	67	20.028	ug/L	0.681	3	39	9108	1
	Zn	68	19.950	ug/L	0.983	4	255	39837	2
	As	75	20.071	ug/L	0.737	3	158	46551	1
	As-1	75	20.111	ug/L	0.965	4	9961	56627	1
	Se	82	20.014	ug/L	0.386	1	8	5394	1
	Se	78	20.144	ug/L	1.124	5	10147	24080	0
	Mo	98	20.053	ug/L	0.442	2	10	106662	1
	Y	89		ug/L			476646	469709	0
	Kr	83		ug/L			449	428	0
>	In	115		ug/L			953484	948846	1
	Ag	107	20.007	ug/L	0.319	1	13	188948	0
	Cd	111	19.987	ug/L	0.331	1	88	91992	1
	Cd	114	19.985	ug/L	0.346	1	30	230697	0
	Sb	121	20.011	ug/L	0.440	2	44	259714	0
	Sb	123	20.057	ug/L	0.354	1	34	197690	1
	Ba	135	20.026	ug/L	0.349	1	12	80091	0
	Ba	137	20.092	ug/L	0 395	1	27	138158	0
>	Tb	159		ug/L			1136829	1148687	0
	Tl	205	19.944	ug/L	0.114	0	37	693292	0
	Pb	208	19.927	ug/L	0.113	0	262	905243	0
	Bi	209		ug/L			2635860	2591740	1
	Th	232	20.106	ug/L	0.200	0	82	817087	1
	U	238	20.007	ug/L	0.109	0	3	894970	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 09:53:04
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens. RSD
>	Li	6		ug/L			1864378	1949766	1
	Be	9	49.747	ug/L	0.949	1	14	243309	0
	C	13		ug/L			127762	117939	2
	Cl	37		ug/L			4732762	5083038	0
>	Sc	45		ug/L			1351908	1410035	4
	V	51	49.894	ug/L	2.323	4	9535	1331810	0
	V-1	51	49.867	ug/L	2.261	4	76	1320005	0
	Cr	52	49.871	ug/L	2.282	4	28286	1143719	0
	Cr	53	49.781	ug/L	2.043	4	171	125465	0
	Mn	55	49.853	ug/L	2.133	4	673	1530299	0
	Co	59	49.849	ug/L	2.104	4	47	1059294	2
>	Ge	72		ug/L			685770	692292	1
	Ni	60	49.920	ug/L	1.772	3	17	221703	2
	Ni	62	50.061	ug/L	1.037	2	137	31712	0
	Cu	63	49.933	ug/L	1.177	2	147	499969	0
	Cu	65	49.916	ug/L	0.738	1	44	220969	0
	Zn	66	49.838	ug/L	1.016	2	266	138767	1
	Zn	67	49.944	ug/L	0.407	0	39	22827	1
	Zn	68	49.684	ug/L	1.653	3	255	97155	1
	As	75	49.894	ug/L	0.418	0	158	115778	1
	As-1	75	49.910	ug/L	0.794	1	9961	126432	0
	Se	82	49.930	ug/L	0.396	0	8	13524	1
	Se	78	49.998	ug/L	1.456	2	10147	45358	0
	Mo	98	50.071	ug/L	0.644	1	10	271649	1
	Y	89		ug/L			476646	480870	2
	Kr	83		ug/L			449	497	3
>	In	115		ug/L			953484	951455	1
	Ag	107	50.181	ug/L	0 941	1	13	484085	2
	Cd	111	50.017	ug/L	0.547	1	88	231106	0
	Cd	114	49.892	ug/L	0.660	1	30	571369	0
	Sb	121	49.976	ug/L	0.947	1	44	648913	1
	Sb	123	50.009	ug/L	0.088	0	34	494754	0
	Ba	135	50.003	ug/L	0.366	0	12	200620	1
	Ba	137	50.042	ug/L	0.254	0	27	346540	0
>	Tb	159		ug/L			1136829	1162250	0
	Tl	205	49.792	ug/L	0.450	0	37	1715456	0
	Pb	208	49.820	ug/L	0.327	0	262	2249145	0
	Bi	209		ug/L			2635860	2569539	0
	Th	232	50.902	ug/L	0.558	1	82	2300361	0
	U	238	50.704	ug/L	0.585	1	3	2468679	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Standard 5
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 09:59:16
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas Intens.	Intens RSD
>	Li	6		ug/L			1864378	1871671	1
	Be	9	99.957	ug/L	0.955	0	14	468668	0
	C	13		ug/L			127762	128078	2
	Cl	37		ug/L			4732762	5142693	3
>	Sc	45		ug/L			1351908	1379854	1
	V	51	100.860	ug/L	1.644	1	9535	2705208	1
	V-1	51	100.633	ug/L	2.141	2	76	2665994	1
	Cr	52	100.860	ug/L	1.107	1	28286	2301972	1
	Cr	53	100.080	ug/L	1.184	1	171	247582	0
	Mn	55	100.388	ug/L	1.051	1	673	3057811	0
	Co	59	100.997	ug/L	0.658	0	47	2174550	0
>	Ge	72		ug/L			685770	683495	1
	Ni	60	99.572	ug/L	1.526	1	17	430489	0
	Ni	62	100.224	ug/L	0.516	0	137	63033	2
	Cu	63	99.223	ug/L	2.216	2	147	956014	0
	Cu	65	99.340	ug/L	0.997	1	44	424817	0
	Zn	66	99.085	ug/L	2.076	2	266	264115	0
	Zn	67	99.798	ug/L	2.696	2	39	44690	1
	Zn	68	99.627	ug/L	1.078	1	255	189790	0
	As	75	99.787	ug/L	2.446	2	158	226807	0
	As-1	75	99.901	ug/L	2.352	2	9961	239142	0
	Se	82	99.170	ug/L	2.684	2	8	25792	1
	Se	78	99.581	ug/L	1.671	1	10147	78222	0
	Mo	98	100.029	ug/L	0.639	0	10	536352	1
	Y	89		ug/L			476646	473175	1
	Kr	83		ug/L			449	535	4
>	In	115		ug/L			953484	933936	0
	Ag	107	99.517	ug/L	3.851	3	13	927156	2
	Cd	111	99.343	ug/L	2.303	2	88	440822	1
	Cd	114	99.691	ug/L	1.222	1	30	1109250	1
	Sb	121	99.962	ug/L	0.435	0	44	1272504	1
	Sb	123	99.889	ug/L	1.505	1	34	966369	0
	Ba	135	100.314	ug/L	1.815	1	12	399180	0
	Ba	137	100.089	ug/L	2.204	2	27	682300	1
>	Tb	159		ug/L			1136829	1144538	1
	Tl	205	101.714	ug/L	0.963	0	37	3659833	0
	Pb	208	100.731	ug/L	1.084	1	262	4589451	0
	Bi	209		ug/L			2635860	2451297	0
	Th	232	100.304	ug/L	1.379	1	82	4508994	0
	U	238	100.068	ug/L	0.775	0	3	4808647	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: Rinse sample
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 10:06:09
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens RSD
>	Li	6		ug/L			1864378	1949219	1
	Be	9	0.002	ug/L	0.001	64	14	25	24
	C	13		ug/L			127762	126063	3
	Cl	37		ug/L			4732762	4941719	2
>	Sc	45		ug/L			1351908	1434087	1
	V	51	-0.004	ug/L	0.008	216	9535	10016	1
	V-1	51	0.000	ug/L	0 000	92	76	91	11
	Cr	52	-0.020	ug/L	0.033	165	28286	29536	1
	Cr	53	-0.007	ug/L	0.007	93	171	163	8
	Mn	55	-0.002	ug/L	0.001	31	673	657	3
	Co	59	0.001	ug/L	0.001	120	47	71	35
>	Ge	72		ug/L			685770	711941	1
	Ni	60	0.002	ug/L	0.002	85	17	28	27
	Ni	62	0.052	ug/L	0.025	47	137	177	7
	Cu	63	0.008	ug/L	0.010	129	147	227	41
	Cu	65	0.008	ug/L	0.010	135	44	79	55
	Zn	66	0.010	ug/L	0.023	237	266	302	19
	Zn	67	0.018	ug/L	0.028	160	39	49	26
	Zn	68	0.013	ug/L	0.026	196	255	291	16
	As	75	-0.008	ug/L	0 013	161	158	145	19
	As-1	75	-0.076	ug/L	0.090	117	9961	10156	0
	Se	82	-0.029	ug/L	0.034	119	8	1	587
	Se	78	-0.268	ug/L	0.265	98	10147	10341	0
	Mo	98	0.018	ug/L	0 004	24	10	109	20
	Y	89		ug/L			476646	491822	0
	Kr	83		ug/L			449	456	3
>	In	115		ug/L			953484	975244	1
	Ag	107	0.004	ug/L	0.003	76	13	50	55
	Cd	111	0.006	ug/L	0.000	2	88	118	1
	Cd	114	0.002	ug/L	0 003	194	30	49	70
	Sb	121	0.108	ug/L	0.012	11	44	1478	10
	Sb	123	0.109	ug/L	0.012	11	34	1137	9
	Ba	135	0.000	ug/L	0.001	164	12	14	24
	Ba	137	0.001	ug/L	0.001	159	27	33	27
>	Tb	159		ug/L			1136829	1156212	1
	Tl	205	0.014	ug/L	0.006	40	37	561	38
	Pb	208	0.001	ug/L	0.001	103	262	315	15
	Bi	209		ug/L			2635860	2682283	0
	Th	232	0.256	ug/L	0.028	11	82	11729	11
	U	238	0.005	ug/L	0.001	16	3	244	16

Sample Information

Sample Date/Time: Friday, December 07, 2012 09:59:16
Method File: C:\NexION Data\Method\200.8nomin.mth
Mass Calibration File: C:\NexION Data\MassCal\Default.tun
Conditions File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

Calibration

Analyte	Mass	r Corr Coef	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
Li	6							
Be	9	**1.0000**	0.003	0.20	10	20	50	100
C	13							
Cl	37							
Sc	45							
V	51	**0.9999**	0.019	0.20	10	20	50	100
V-1	51	**0.9999**	0.019	0.20	10	20	50	100
Cr	52	**0.9999**	0.016	0.50	10	20	50	100
Cr	53	**1.0000**	0.002	0.50	10	20	50	100
Mn	55	**1.0000**	0.022	0.50	10	20	50	100
Co	59	**0.9998**	0.016	0.20	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.006	0.50	10	20	50	100
Ni	62	**1.0000**	0.001	0.50	10	20	50	100
Cu	63	**0.9999**	0.014	0.50	10	20	50	100
Cu	65	**0.9999**	0.006	0.50	10	20	50	100
Zn	66	**0.9998**	0.004	4.00	10	20	50	100
Zn	67	**1.0000**	0.001	4.00	10	20	50	100
Zn	68	**1.0000**	0.003	4.00	10	20	50	100
As	75	**1.0000**	0.003	0.20	10	20	50	100
As-1	75	**1.0000**	0.003	0.20	10	20	50	100
Se	82	**0.9998**	0.000	0.50	10	20	50	100
Se	78	**1.0000**	0.001	0.50	10	20	50	100
Mo	98	**1.0000**	0.008	0.20	10	20	50	100
Y	89							
Kr	83							
In	115							
Ag	107	**1.0000**	0.010	0.20	10	20	50	100
Cd	111	**0.9999**	0.005	0.10	10	20	50	100
Cd	114	**1.0000**	0.012	0.10	10	20	50	100
Sb	121	**1.0000**	0.014	0.20	10	20	50	100
Sb	123	**1.0000**	0.010	0.20	10	20	50	100
Ba	135	**1.0000**	0.004	0.50	10	20	50	100
Ba	137	**1.0000**	0.007	0.50	10	20	50	100
Tb	159							
Tl	205	**0.9995**	0.031	0.20	10	20	50	100
Pb	208	**0.9999**	0.040	0.10	10	20	50	100
Bi	209							
Th	232	**0.9998**	0.039	0.20	10	20	50	100
U	238	**0.9999**	0.042	0.20	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICV
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 10:13:02
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1952222	1
	Be	9	51.137	ug/L	0.145	0	14	250113	1
	C	13		ug/L			127762	132217	2
	Cl	37		ug/L			4732762	5210546	0
>	Sc	45		ug/L			1351908	1433075	2
	V	51	49.842	ug/L	0 655	1	9535	1393338	1
	V-1	51	50.655	ug/L	0.659	1	76	1393649	1
	Cr	52	49.155	ug/L	1.006	2	28286	1180206	0
	Cr	53	51.924	ug/L	1.257	2	171	133462	1
	Mn	55	51.015	ug/L	1.443	2	673	1613641	0
	Co	59	50.009	ug/L	1.329	2	47	1117927	0
>	Ge	72		ug/L			685770	707746	0
	Ni	60	51.384	ug/L	0.368	0	17	230074	0
	Ni	62	51.332	ug/L	1.115	2	137	33495	1
	Cu	63	52.022	ug/L	1.979	3	147	519158	3
	Cu	65	51.529	ug/L	0.724	1	44	228228	1
	Zn	66	50.855	ug/L	1.140	2	266	140515	1
	Zn	67	50.417	ug/L	0.974	1	39	23403	1
	Zn	68	51.030	ug/L	1.368	2	255	100789	1
	As	75	50.993	ug/L	0.321	0	158	120123	0
	As-1	75	51.110	ug/L	0.429	0	9961	131735	0
	Se	82	80.946	ug/L	0.241	0	8	21567	0
	Se	78	79.438	ug/L	0.522	0	10147	66733	0
	Mo	98	49.954	ug/L	0.289	0	10	277367	0
	Y	89		ug/L			476646	488117	1
	Kr	83		ug/L			449	490	2
>	In	115		ug/L			953484	970278	1
	Ag	107	52.782	ug/L	1.045	1	13	510991	2
	Cd	111	50.256	ug/L	0.842	1	88	231727	1
	Cd	114	50.500	ug/L	1.199	2	30	583726	1
	Sb	121	49.921	ug/L	1.531	3	44	660065	1
	Sb	123	49.530	ug/L	0.720	1	34	497808	0
	Ba	135	50.626	ug/L	1.329	2	12	209279	1
	Ba	137	51.262	ug/L	1.171	2	27	363028	1
>	Tb	159		ug/L			1136829	1172154	0
	Tl	205	48.609	ug/L	0.379	0	37	1791395	1
	Pb	208	49.706	ug/L	0.257	0	262	2319631	0
	Bi	209		ug/L			2635860	2563604	0
	Th	232	52.440	ug/L	0.738	1	82	2414461	0
	U	238	53.013	ug/L	0.500	0	3	2609006	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 10:19:53
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas Intens.	Intens RSD
>	Li	6		ug/L			1864378	1944014	0
	Be	9	0.002	ug/L	0.001	51	14	23	17
	C	13		ug/L			127762	128014	1
	Cl	37		ug/L			4732762	4913966	1
>	Sc	45		ug/L			1351908	1429151	0
	V	51	-0.010	ug/L	0.018	178	9535	9804	4
	V-1	51	0.000	ug/L	0.001	162	76	94	23
	Cr	52	-0.035	ug/L	0 060	174	28286	29090	4
	Cr	53	0.000	ug/L	0.003	894	171	182	4
	Mn	55	-0.002	ug/L	0.001	92	673	663	6
	Co	59	0.001	ug/L	0.001	112	47	64	24
>	Ge	72		ug/L			685770	711663	1
	Ni	60	0.002	ug/L	0.001	74	17	25	21
	Ni	62	0.021	ug/L	0.014	66	137	156	5
	Cu	63	0.001	ug/L	0.003	262	147	163	15
	Cu	65	0.001	ug/L	0.001	48	44	52	6
	Zn	66	-0.008	ug/L	0.005	63	266	255	6
	Zn	67	0.001	ug/L	0.007	716	39	41	10
	Zn	68	-0.015	ug/L	0.011	73	255	234	8
	As	75	-0.006	ug/L	0.014	228	158	150	21
	As-1	75	-0.097	ug/L	0.054	55	9961	10102	0
	Se	82	-0.064	ug/L	0.009	14	8	-7	30
	Se	78	-0.350	ug/L	0.201	57	10147	10279	0
	Mo	98	0.012	ug/L	0.007	60	10	79	51
	Y	89		ug/L			476646	486353	1
	Kr	83		ug/L			449	481	6
>	In	115		ug/L			953484	965339	1
	Ag	107	0.005	ug/L	0.006	132	13	59	102
	Cd	111	0.010	ug/L	0.009	96	88	133	32
	Cd	114	0.003	ug/L	0.004	130	30	70	73
	Sb	121	0.038	ug/L	0.007	18	44	547	17
	Sb	123	0.041	ug/L	0.006	14	34	440	12
	Ba	135	0.001	ug/L	0 001	50	12	17	14
	Ba	137	-0.000	ug/L	0.002	572	27	25	54
>	Tb	159		ug/L			1136829	1155303	0
	Tl	205	0.007	ug/L	0.002	22	37	293	20
	Pb	208	0.001	ug/L	0.002	233	262	305	28
	Bi	209		ug/L			2635860	2666642	0
	Th	232	0.139	ug/L	0.013	9	82	6384	10
	U	238	0.004	ug/L	0.002	44	3	176	42

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 10:24:01
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1927319	1
	Be	9	51.383	ug/L	1.287	2	14	248059	1
	C	13		ug/L			127762	120733	2
	Cl	37		ug/L			4732762	5158142	3
>	Sc	45		ug/L			1351908	1421484	0
	V	51	47.801	ug/L	0.330	0	9535	1326117	0
	V-1	51	48.430	ug/L	0.262	0	76	1321893	0
	Cr	52	47.869	ug/L	0.735	1	28286	1141068	0
	Cr	53	50.027	ug/L	0.684	1	171	127589	0
	Mn	55	49.257	ug/L	1.349	2	673	1546039	2
	Co	59	48.723	ug/L	0.456	0	47	1080790	1
>	Ge	72		ug/L			685770	708514	0
	Ni	60	50.225	ug/L	0.430	0	17	225125	0
	Ni	62	50.161	ug/L	0.851	1	137	32769	1
	Cu	63	49.912	ug/L	0.629	1	147	498733	1
	Cu	65	50.485	ug/L	0.554	1	44	223834	0
	Zn	66	49.352	ug/L	1.054	2	266	136524	1
	Zn	67	49.332	ug/L	0 839	1	39	22926	1
	Zn	68	48.787	ug/L	0.728	1	255	96485	1
	As	75	49.122	ug/L	0.286	0	158	115852	1
	As-1	75	48.994	ug/L	0.418	0	9961	126849	1
	Se	82	50.496	ug/L	0.470	0	8	13471	0
	Se	78	49.478	ug/L	0.294	0	10147	45564	0
	Mo	98	49.446	ug/L	1.082	2	10	274873	2
	Y	89		ug/L			476646	490576	1
	Kr	83		ug/L			449	494	3
>	In	115		ug/L			953484	965788	0
	Ag	107	51.041	ug/L	1 883	3	13	491824	3
	Cd	111	49.894	ug/L	0.122	0	88	229015	0
	Cd	114	49.452	ug/L	0.320	0	30	569043	0
	Sb	121	49.780	ug/L	0.461	0	44	655313	0
	Sb	123	49.035	ug/L	0.837	1	34	490607	1
	Ba	135	49.216	ug/L	0.464	0	12	202549	0
	Ba	137	49.665	ug/L	0.481	0	27	350167	1
>	Tb	159		ug/L			1136829	1171266	1
	Tl	205	47.034	ug/L	0.396	0	37	1731928	0
	Pb	208	48.257	ug/L	0.685	1	262	2250109	0
	Bi	209		ug/L			2635860	2582801	0
	Th	232	50.236	ug/L	0.991	1	82	2310999	0
	U	238	50.349	ug/L	0.904	1	3	2475779	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 10:30:34
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas. Intens	Intens. RSD
>	Li	6		ug/L			1864378	1943018	0
	Be	9	0.001	ug/L	0.001	93	14	19	19
	C	13		ug/L			127762	129484	0
	Cl	37		ug/L			4732762	5117252	5
>	Sc	45		ug/L			1351908	1378479	1
	V	51	0.008	ug/L	0.018	216	9535	9943	3
	V-1	51	0.000	ug/L	0.001	614	76	80	16
	Cr	52	0.026	ug/L	0.056	213	28286	29418	2
	Cr	53	-0.002	ug/L	0.004	211	171	170	7
	Mn	55	-0.001	ug/L	0.001	60	673	646	2
	Co	59	0.000	ug/L	0.000	41	47	58	5
>	Ge	72		ug/L			685770	690694	0
	Ni	60	0.002	ug/L	0.002	82	17	27	27
	Ni	62	0.041	ug/L	0.007	16	137	164	3
	Cu	63	0.001	ug/L	0.001	120	147	160	9
	Cu	65	0.000	ug/L	0.003	626	44	46	27
	Zn	66	-0.012	ug/L	0.002	15	266	235	2
	Zn	67	-0.023	ug/L	0.004	18	39	29	6
	Zn	68	-0.005	ug/L	0.007	145	255	248	4
	As	75	-0.010	ug/L	0.004	40	158	135	7
	As-1	75	0.029	ug/L	0.016	54	9961	10099	0
	Se	82	-0.047	ug/L	0.013	28	8	-3	105
	Se	78	0.108	ug/L	0.059	55	10147	10294	0
	Mo	98	0.013	ug/L	0.002	12	10	80	10
	Y	89		ug/L			476646	481795	1
	Kr	83		ug/L			449	472	1
>	In	115		ug/L			953484	953908	1
	Ag	107	0.002	ug/L	0.000	8	13	33	6
	Cd	111	0.008	ug/L	0.003	44	88	122	13
	Cd	114	0.001	ug/L	0.001	76	30	38	14
	Sb	121	0.074	ug/L	0.008	11	44	1007	10
	Sb	123	0.074	ug/L	0.007	8	34	761	7
	Ba	135	0.001	ug/L	0.001	125	12	15	28
	Ba	137	-0.001	ug/L	0.000	64	27	22	15
>	Tb	159		ug/L			1136829	1129523	0
	Tl	205	0.006	ug/L	0.003	41	37	255	35
	Pb	208	0.000	ug/L	0.001	188	262	274	9
	Bi	209		ug/L			2635860	2648020	0
	Th	232	0.198	ug/L	0.022	11	82	8879	10
	U	238	0.003	ug/L	0.000	6	3	147	7

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~LOW CHECK~~ ZZZZZZ
Sample Dil Factor: At 10-7
Comments: NO Sample in Place
Sample Date/Time: Friday, December 07, 2012 10:34:41
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens RSD
>	Li	6		ug/L			1864378	3028044	40
	Be	9	-0.002	ug/L	0.000	19	14	10	65
	C	13		ug/L			127762	94737	19
	Cl	37		ug/L			4732762	2616400	19
>	Sc	45		ug/L			1351908	2461387	44
	V	51	-0.256	ug/L	0.027	10	9535	4836	31
	V-1	51	-0.001	ug/L	0.001	45	76	66	25
	Cr	52	-0.898	ug/L	0.093	10	28286	14373	31
	Cr	53	-0.046	ug/L	0 007	14	171	99	24
	Mn	55	-0.007	ug/L	0.006	81	673	900	64
	Co	59	-0.000	ug/L	0.001	369	47	62	1
>	Ge	72		ug/L			685770	1168188	40
	Ni	60	-0.001	ug/L	0.001	57	17	20	25
	Ni	62	-0.088	ug/L	0.032	36	137	132	32
	Cu	63	-0.008	ug/L	0.001	15	147	117	34
	Cu	65	-0.005	ug/L	0.002	33	44	40	34
	Zn	66	-0.071	ug/L	0.009	13	266	123	41
	Zn	67	-0.047	ug/L	0.024	52	39	27	26
	Zn	68	-0.052	ug/L	0.010	19	255	275	47
	As	75	0.103	ug/L	0.087	84	158	736	66
	As-1	75	-1.759	ug/L	0.790	44	9961	9224	16
	Se	82	-0.011	ug/L	0.020	177	8	10	112
	Se	78	-6.145	ug/L	2.647	43	10147	9258	16
	Mo	98	0.002	ug/L	0.003	118	10	34	42
	Y	89		ug/L			476646	879642	36
	Kr	83		ug/L			449	976	65
>	In	115		ug/L			953484	1809194	41
	Ag	107	-0.000	ug/L	0.001	540	13	22	23
	Cd	111	-0.007	ug/L	0.002	30	88	106	37
	Cd	114	-0.000	ug/L	0.000	59	30	46	37
	Sb	121	0.009	ug/L	0.007	80	44	285	67
	Sb	123	0.009	ug/L	0.007	77	34	214	58
	Ba	135	-0.002	ug/L	0.000	15	12	5	92
	Ba	137	-0.003	ug/L	0.000	10	27	13	22
>	Tb	159		ug/L			1136829	2349381	39
	Tl	205	0.002	ug/L	0.001	65	37	191	63
	Pb	208	-0.004	ug/L	0.000	11	262	185	24
	Bi	209		ug/L			2635860	5152421	32
	Th	232	0.307	ug/L	0.261	85	82	25246	92
	U	238	0.001	ug/L	0.001	70	3	75	43

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~ICSA~~ 222222
Sample Dil Factor:
Comments: H 12-7-12 VD Sample in place
Sample Date/Time: Friday, December 07, 2012 10:38:49
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	3324792	21
	Be	9	-0.002	ug/L	0.000	9	14	7	27
	C	13		ug/L			127762	96539	15
	Cl	37		ug/L			4732762	2707354	13
>	Sc	45		ug/L			1351908	2791299	18
	V	51	-0.273	ug/L	0.009	3	9535	5004	27
	V-1	51	-0.002	ug/L	0.000	19	76	57	13
	Cr	52	-0.956	ug/L	0.029	3	28286	14990	27
	Cr	53	-0.048	ug/L	0.001	2	171	112	14
	Mn	55	-0.010	ug/L	0.007	69	673	833	58
	Co	59	-0.001	ug/L	0.000	33	47	56	11
>	Ge	72		ug/L			685770	1275148	17
	Ni	60	-0.002	ug/L	0.000	22	17	15	42
	Ni	62	-0.085	ug/L	0.004	4	137	156	17
	Cu	63	-0.008	ug/L	0 001	8	147	120	14
	Cu	65	-0.006	ug/L	0.001	12	44	37	26
	Zn	66	-0.073	ug/L	0.006	7	266	135	33
	Zn	67	-0.061	ug/L	0.009	15	39	22	42
	Zn	68	-0.070	ug/L	0.013	19	255	234	36
	As	75	0.091	ug/L	0.113	124	158	710	71
	As-1	75	-2.112	ug/L	0.176	8	9961	9411	12
	Se	82	-0.021	ug/L	0.025	119	8	7	159
	Se	78	-7.319	ug/L	0.575	7	10147	9461	12
	Mo	98	0.001	ug/L	0.001	129	10	26	38
	Y	89		ug/L			476646	980738	17
	Kr	83		ug/L			449	976	63
>	In	115		ug/L			953484	2035578	17
	Ag	107	-0.001	ug/L	0.000	47	13	18	43
	Cd	111	-0.008	ug/L	0.001	6	88	108	21
	Cd	114	-0.001	ug/L	0.000	24	30	41	11
	Sb	121	0.004	ug/L	0.004	115	44	192	66
	Sb	123	0.004	ug/L	0.004	95	34	149	52
	Ba	135	-0.002	ug/L	0.001	27	12	9	38
	Ba	137	-0.003	ug/L	0.000	4	27	11	34
>	Tb	159		ug/L			1136829	2712397	12
	Tl	205	0.001	ug/L	0.000	65	37	151	33
	Pb	208	-0.004	ug/L	0.000	1	262	176	17
	Bi	209		ug/L			2635860	5767725	9
	Th	232	0.065	ug/L	0.056	85	82	7187	89
	U	238	0.000	ug/L	0.000	53	3	49	37

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~ICSAB~~ 222222
Sample Dil Factor: * 12-7-12
Comments: 20 Samples in place
Sample Date/Time: Friday, December 07, 2012 10:45:20
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens RSD
>	**Li**	**6**		ug/L			1864378	3123171	25
	Be	**9**	**-0.002**	ug/L	0.000	6	14	8	37
	C	**13**		ug/L			127762	97427	16
	Cl	**37**		ug/L			4732762	2621367	9
>	**Sc**	**45**		ug/L			1351908	2587545	28
	V	**51**	**-0.265**	ug/L	0.008	2	9535	4900	22
	V-1	**51**	**-0.002**	ug/L	0.000	9	76	64	22
	Cr	**52**	**-0.930**	ug/L	0.029	3	28286	14612	21
	Cr	**53**	**-0.047**	ug/L	0.004	7	171	104	16
	Mn	**55**	**-0.009**	ug/L	0.007	82	673	846	63
	Co	**59**	**-0.001**	ug/L	0.001	95	47	58	9
>	**Ge**	**72**		ug/L			685770	1221074	23
	Ni	**60**	**-0.002**	ug/L	0.000	10	17	14	12
	Ni	**62**	**-0.078**	ug/L	0.005	6	137	157	23
	Cu	**63**	**-0.008**	ug/L	0.001	9	147	132	22
	Cu	**65**	**-0.006**	ug/L	0.001	8	44	33	31
	Zn	**66**	**-0.075**	ug/L	0.007	9	266	120	42
	Zn	**67**	**-0.063**	ug/L	0.003	4	39	20	27
	Zn	**68**	**-0.066**	ug/L	0.017	24	255	238	42
	As	**75**	**0.100**	ug/L	0.108	108	158	741	70
	As-1	**75**	**-2.005**	ug/L	0.240	11	9961	9364	14
	Se	**82**	**-0.002**	ug/L	0.031	1244	8	14	107
	Se	**78**	**-6.961**	ug/L	0.806	11	10147	9410	14
	Mo	**98**	**0.000**	ug/L	0.001	162	10	22	29
	Y	**89**		ug/L			476646	948667	24
	Kr	**83**		ug/L			449	987	65
>	**In**	**115**		ug/L			953484	1986268	26
	Ag	**107**	**-0.000**	ug/L	0.000	57	13	21	36
	Cd	**111**	**-0.009**	ug/L	0.002	25	88	99	39
	Cd	**114**	**-0.001**	ug/L	0.001	76	30	47	44
	Sb	**121**	**0.002**	ug/L	0.003	155	44	144	70
	Sb	**123**	**0.002**	ug/L	0.003	175	34	104	68
	Ba	**135**	**-0.002**	ug/L	0.000	4	12	4	12
	Ba	**137**	**-0.003**	ug/L	0.000	12	27	15	52
>	**Tb**	**159**		ug/L			1136829	2570171	24
	Tl	**205**	**0.001**	ug/L	0.001	118	37	165	72
	Pb	**208**	**-0.004**	ug/L	0.000	7	262	194	36
	Bi	**209**		ug/L			2635860	5509558	15
	Th	**232**	**0.039**	ug/L	0.032	82	82	3876	80
	U	**238**	**0.000**	ug/L	0.000	47	3	37	42

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~LR200~~ ZZZZZZ 4 QC Samples in Place
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 10:52:11
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	**Li**	**6**		ug/L			1864378	3401745	11
	Be	**9**	**-0.002**	ug/L	0.000	19	14	7	58
	C	**13**		ug/L			127762	100497	11
	Cl	**37**		ug/L			4732762	2759873	10
>	**Sc**	**45**		ug/L			1351908	2824577	8
	V	**51**	**-0.272**	ug/L	0.011	3	9535	5054	19
	V-1	**51**	**-0.002**	ug/L	0.000	8	76	56	8
	Cr	**52**	**-0.956**	ug/L	0.036	3	28286	15108	19
	Cr	**53**	**-0.049**	ug/L	0.002	3	171	108	12
	Mn	**55**	**-0.009**	ug/L	0.008	87	673	863	60
	Co	**59**	**-0.001**	ug/L	0.000	17	47	65	6
>	**Ge**	**72**		ug/L			685770	1295429	6
	Ni	**60**	**-0.002**	ug/L	0 000	15	17	16	22
	Ni	**62**	**-0.087**	ug/L	0.011	12	137	156	9
	Cu	**63**	**-0.008**	ug/L	0.000	1	147	124	6
	Cu	**65**	**-0.005**	ug/L	0.000	7	44	40	6
	Zn	**66**	**-0.075**	ug/L	0.006	7	266	127	28
	Zn	**67**	**-0.065**	ug/L	0.010	16	39	19	46
	Zn	**68**	**-0.063**	ug/L	0.026	40	255	256	38
	As	**75**	**0.107**	ug/L	0.120	112	158	770	68
	As-1	**75**	**-2.172**	ug/L	0.173	7	9961	9372	10
	Se	**82**	**-0.005**	ug/L	0.017	373	8	15	60
	Se	**78**	**-7.525**	ug/L	0.583	7	10147	9418	10
	Mo	**98**	**0.000**	ug/L	0.000	1963	10	20	23
	Y	**89**		ug/L			476646	985559	8
	Kr	**83**		ug/L			449	1020	63
>	**In**	**115**		ug/L			953484	2063314	7
	Ag	**107**	**-0.001**	ug/L	0.000	52	13	15	53
	Cd	**111**	**-0.009**	ug/L	0.001	15	88	105	13
	Cd	**114**	**-0.001**	ug/L	0.000	26	30	44	5
	Sb	**121**	**0.001**	ug/L	0.002	380	44	110	55
	Sb	**123**	**0.000**	ug/L	0.002	804	34	79	60
	Ba	**135**	**-0.002**	ug/L	0.000	10	12	8	24
	Ba	**137**	**-0.003**	ug/L	0.000	8	27	13	29
>	**Tb**	**159**		ug/L			1136829	2822988	3
	Tl	**205**	**0.000**	ug/L	0.000	346	37	102	33
	Pb	**208**	**-0.004**	ug/L	0.000	3	262	193	9
	Bi	**209**		ug/L			2635860	6021323	3
	Th	**232**	**0.021**	ug/L	0.017	83	82	2457	75
	U	**238**	**0.000**	ug/L	0.000	74	3	20	41

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LOW CHECK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 11:00:00
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1963413	2
	Be	9	0.199	ug/L	0.005	2	14	994	0
	C	13		ug/L			127762	137881	0
	Cl	37		ug/L			4732762	5066858	4
>	Sc	45		ug/L			1351908	1441892	1
	V	51	0.190	ug/L	0.013	6	9535	15483	3
	V-1	51	0.197	ug/L	0.002	1	76	5530	0
	Cr	52	0.471	ug/L	0.028	5	28286	41257	2
	Cr	53	0.502	ug/L	0.022	4	171	1479	2
	Mn	55	0.482	ug/L	0.001	0	673	16067	1
	Co	59	0.195	ug/L	0 008	4	47	4432	3
>	Ge	72		ug/L			685770	693853	2
	Ni	60	0.521	ug/L	0.021	4	17	2303	2
	Ni	62	0.565	ug/L	0.040	7	137	498	3
	Cu	63	0.525	ug/L	0.017	3	147	5285	3
	Cu	65	0.526	ug/L	0.023	4	44	2328	2
	Zn	66	4.532	ug/L	0.118	2	266	12517	0
	Zn	67	4.113	ug/L	0.117	2	39	1907	1
	Zn	68	4.444	ug/L	0.093	2	255	8839	0
	As	75	0.227	ug/L	0.014	6	158	683	6
	As-1	75	0.287	ug/L	0.093	32	9961	10742	0
	Se	82	0.584	ug/L	0 022	3	8	161	4
	Se	78	0.766	ug/L	0.373	48	10147	10794	0
	Mo	98	0.209	ug/L	0.011	5	10	1150	3
	Y	89		ug/L			476646	499063	0
	Kr	83		ug/L			449	454	3
>	In	115		ug/L			953484	971094	1
	Ag	107	0.207	ug/L	0.003	1	13	2016	0
	Cd	111	0.111	ug/L	0.003	2	88	600	1
	Cd	114	0.104	ug/L	0.004	3	30	1234	4
	Sb	121	0.197	ug/L	0.002	1	44	2650	1
	Sb	123	0.200	ug/L	0.007	3	34	2047	2
	Ba	135	0.504	ug/L	0.007	1	12	2097	1
	Ba	137	0.510	ug/L	0.010	2	27	3640	1
>	Tb	159		ug/L			1136829	1162377	0
	Tl	205	0.198	ug/L	0.003	1	37	7270	1
	Pb	208	0.113	ug/L	0.001	1	262	5508	1
	Bi	209		ug/L			2635860	2725730	1
	Th	232	0.122	ug/L	0.008	6	82	5670	7
	U	238	0.186	ug/L	0.000	0	3	9080	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSA
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 11:04:08
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens RSD
> Li	6		ug/L			1864378	1972236	0
Be	9	0.000	ug/L	0.001	2164	14	15	22
C	13		ug/L			127762	238462	3
Cl	37		ug/L			4732762	14490128	6
> Sc	45		ug/L			1351908	1462930	0
V	51	0.139	ug/L	0.021	14	9535	14259	3
V-1	51	1.234	ug/L	0.021	1	76	34742	1
Cr	52	0.547	ug/L	0.026	4	28286	43684	1
Cr	53	4.312	ug/L	0.030	0	171	11486	0
Mn	55	0.079	ug/L	0.001	0	673	3293	0
Co	59	0.027	ug/L	0.001	3	47	660	3
> Ge	72		ug/L			685770	686568	0
Ni	60	0.372	ug/L	0.018	4	17	1633	5
Ni	62	8.205	ug/L	1.249	20	137	4049	19
Cu	63	1.122	ug/L	0.110	9	147	11004	9
Cu	65	0.415	ug/L	0.003	0	44	1828	1
Zn	66	0.965	ug/L	0.006	0	266	2847	0
Zn	67	4.952	ug/L	0.076	1	39	2265	0
Zn	68	0.371	ug/L	0.010	2	255	965	2
As	75	0.028	ug/L	0.032	115	158	222	33
As-1	75	0.386	ug/L	0.057	14	9961	10862	0
Se	82	-0.300	ug/L	0.018	6	8	-68	6
Se	78	1.312	ug/L	0.178	13	10147	11060	0
Mo	98	427.166	ug/L	6.265	1	10	2300640	0
Y	89		ug/L			476646	496269	2
Kr	83		ug/L			449	797	3
> In	115		ug/L			953484	951983	1
Ag	107	0.020	ug/L	0.003	13	13	205	11
Cd	111	0.224	ug/L	0.021	9	88	1100	10
Cd	114	0.349	ug/L	0.005	1	30	3989	2
Sb	121	0.062	ug/L	0.004	6	44	848	5
Sb	123	0.061	ug/L	0.001	1	34	633	1
Ba	135	0.052	ug/L	0.004	7	12	223	6
Ba	137	0.041	ug/L	0.002	6	27	312	4
> Tb	159		ug/L			1136829	1188966	0
Tl	205	0.037	ug/L	0 002	6	37	1417	5
Pb	208	0.032	ug/L	0.001	3	262	1804	2
Bi	209		ug/L			2635860	2430533	1
Th	232	0.046	ug/L	0.005	10	82	2211	9
U	238	0.001	ug/L	0.000	10	3	59	9

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ICSAB
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 11:10:39
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens RSD
>	**Li**	**6**		ug/L			1864378	2000495	2
	Be	**9**	**0.000**	ug/L	0.001	956	14	16	33
	C	**13**		ug/L			127762	244720	3
	Cl	**37**		ug/L			4732762	14227762	0
>	**Sc**	**45**		ug/L			1351908	1490102	1
	V	**51**	**0.003**	ug/L	0.027	825	9535	10610	8
	V-1	**51**	**1.177**	ug/L	0 010	0	76	33744	1
	Cr	**52**	**19.139**	ug/L	0.205	1	28286	496964	1
	Cr	**53**	**23.736**	ug/L	0.298	1	171	63555	1
	Mn	**55**	**19.356**	ug/L	0.506	2	673	637180	1
	Co	**59**	**18.288**	ug/L	0.345	1	47	425191	0
>	**Ge**	**72**		ug/L			685770	681869	0
	Ni	**60**	**20.992**	ug/L	0.349	1	17	90562	0
	Ni	**62**	**25.570**	ug/L	0.908	3	137	16142	2
	Cu	**63**	**20.960**	ug/L	0.424	2	147	201614	1
	Cu	**65**	**20.404**	ug/L	0.096	0	44	87090	0
	Zn	**66**	**20.081**	ug/L	0.486	2	266	53616	1
	Zn	**67**	**21.783**	ug/L	0.431	1	39	9763	1
	Zn	**68**	**18.858**	ug/L	0.058	0	255	36050	0
	As	**75**	**19.740**	ug/L	0.132	0	158	44897	0
	As-1	**75**	**19.886**	ug/L	0.181	0	9961	55432	0
	Se	**82**	**-0.268**	ug/L	0.029	10	8	-59	11
	Se	**78**	**1.287**	ug/L	0 193	15	10147	10967	0
	Mo	**98**	**431.438**	ug/L	7.031	1	10	2307763	1
	Y	**89**		ug/L			476646	487696	0
	Kr	**83**		ug/L			449	784	2
>	**In**	**115**		ug/L			953484	973897	1
	Ag	**107**	**19.031**	ug/L	0.579	3	13	184874	1
	Cd	**111**	**19.434**	ug/L	0.507	2	88	89978	0
	Cd	**114**	**19.437**	ug/L	0.189	0	30	225533	0
	Sb	**121**	**0.063**	ug/L	0.000	0	44	881	1
	Sb	**123**	**0.061**	ug/L	0.003	5	34	650	6
	Ba	**135**	**0.048**	ug/L	0.001	3	12	211	1
	Ba	**137**	**0.038**	ug/L	0.001	3	27	298	2
>	**Tb**	**159**		ug/L			1136829	1185166	0
	Tl	**205**	**0.031**	ug/L	0.001	1	37	1209	1
	Pb	**208**	**0.030**	ug/L	0.001	4	262	1677	3
	Bi	**209**		ug/L			2635860	2417199	0
	Th	**232**	**0.022**	ug/L	0.002	10	82	1089	9
	U	**238**	**0.000**	ug/L	0.000	42	3	20	35

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR200
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 11:17:30
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens. RSD
>	Li	6		ug/L			1864378	1915961	4
	Be	9	199.418	ug/L	7.321	3	14	956245	0
	C	13		ug/L			127762	140423	0
	Cl	37		ug/L			4732762	5488720	2
>	Sc	45		ug/L			1351908	1389618	2
	V	51	201.388	ug/L	1.805	0	9535	5429695	1
	V-1	51	202.074	ug/L	1.462	0	76	5391227	1
	Cr	52	196.009	ug/L	4.854	2	28286	4476282	0
	Cr	53	198.196	ug/L	3.701	1	171	493518	0
	Mn	55	199.577	ug/L	0.153	0	673	6122021	2
	Co	59	195.003	ug/L	2.999	1	47	4227585	0
>	Ge	72		ug/L			685770	666120	1
	Ni	60	199.598	ug/L	2.355	1	17	841138	1
	Ni	62	203.177	ug/L	5 549	2	137	124374	2
	Cu	63	197.448	ug/L	1.108	0	147	1854314	0
	Cu	65	195.273	ug/L	1.807	0	44	813856	1
	Zn	66	192.248	ug/L	3.128	1	266	499225	0
	Zn	67	194.326	ug/L	2.432	1	39	84785	0
	Zn	68	195.777	ug/L	0.754	0	255	363282	1
	As	75	201.059	ug/L	0.521	0	158	445330	0
	As-1	75	201.217	ug/L	0.507	0	9961	459724	0
	Se	82	197.805	ug/L	2 128	1	8	49589	1
	Se	78	196.524	ug/L	1.959	0	10147	140857	1
	Mo	98	207.587	ug/L	3.682	1	10	1084704	1
	Y	89		ug/L			476646	471513	0
	Kr	83		ug/L			449	719	2
>	In	115		ug/L			953484	932147	1
	Ag	107	197.271	ug/L	4.946	2	13	1835285	4
	Cd	111	194.477	ug/L	2.759	1	88	861182	0
	Cd	114	212.709	ug/L	2.743	1	30	2362012	1
	Sb	121	216.982	ug/L	1.141	0	44	2756658	1
	Sb	123	201.263	ug/L	3.243	1	34	1943142	0
	Ba	135	203.353	ug/L	4.145	2	12	807550	0
	Ba	137	205.211	ug/L	2.761	1	27	1396182	1
>	Tb	159		ug/L			1136829	1156251	1
	Tl	205	197.067	ug/L	3.386	1	37	7162793	0
	Pb	208	198.994	ug/L	0.902	0	262	9159482	0
	Bi	209		ug/L			2635860	2352368	0
	Th	232	198.492	ug/L	1.156	0	82	9014804	0
	U	238	198.356	ug/L	0.730	0	3	9629668	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: LR300
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 11:24:22
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1842775	0
	Be	9	287.793	ug/L	4.632	1	14	1328610	1
	C	13		ug/L			127762	135006	4
	Cl	37		ug/L			4732762	5214265	2
>	Sc	45		ug/L			1351908	1322517	0
	V	51	298.544	ug/L	4.259	1	9535	7657122	1
	V-1	51	300.495	ug/L	5.447	1	76	7630862	2
	Cr	52	294.762	ug/L	0.347	0	28286	6394864	0
	Cr	53	301.332	ug/L	3.597	1	171	714221	1
	Mn	55	299.945	ug/L	2.376	0	673	8756243	1
	Co	59	293.757	ug/L	2.561	0	47	6062148	0
>	Ge	72		ug/L			685770	642077	1
	Ni	60	288.995	ug/L	2.628	0	17	1173756	0
	Ni	62	301.638	ug/L	13.072	4	137	177858	2
	Cu	63	303.062	ug/L	4.485	1	147	2743175	1
	Cu	65	283.926	ug/L	7.578	2	44	1140284	0
	Zn	66	278.311	ug/L	6.194	2	266	696410	0
	Zn	67	276.121	ug/L	2.488	0	39	116106	0
	Zn	68	279.047	ug/L	7.810	2	255	498849	1
	As	75	294.144	ug/L	2.750	0	158	627875	1
	As-1	75	295.400	ug/L	3.168	1	9961	646129	1
	Se	82	284.627	ug/L	4.764	1	8	68764	0
	Se	78	286.504	ug/L	5.120	1	10147	193556	0
	Mo	98	307.837	ug/L	8.446	2	10	1550133	0
	Y	89		ug/L			476646	446767	1
	Kr	83		ug/L			449	911	3
>	In	115		ug/L			953484	895957	0
	Ag	107	300.737	ug/L	4.442	1	13	2688477	1
	Cd	111	284.980	ug/L	4.421	1	88	1213093	1
	Cd	114	307.685	ug/L	1.728	0	30	3284385	0
	Sb	121	320.681	ug/L	2.034	0	44	3916109	0
	Sb	123	313.332	ug/L	1.419	0	34	2908201	0
	Ba	135	302.332	ug/L	2.296	0	12	1154259	0
	Ba	137	321.298	ug/L	13.989	4	27	2101462	4
>	Tb	159		ug/L			1136829	1104102	1
	Tl	205	296.284	ug/L	3.377	1	37	10284046	0
	Pb	208	304.667	ug/L	3.489	1	262	13390365	0
	Bi	209		ug/L			2635860	2233452	0
	Th	232	303.185	ug/L	3 827	1	82	13148058	0
	U	238	302.048	ug/L	0.812	0	3	14002323	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: B1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 11:31:13
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens RSD
>	Li	6		ug/L			1864378	1919951	2
	Be	9	0.005	ug/L	0.002	30	14	39	19
	C	13		ug/L			127762	138020	0
	Cl	37		ug/L			4732762	5087116	1
>	Sc	45		ug/L			1351908	1389406	0
	V	51	0.013	ug/L	0.004	33	9535	10143	1
	V-1	51	0.015	ug/L	0.000	3	76	487	3
	Cr	52	0.041	ug/L	0 011	26	28286	30005	1
	Cr	53	0.051	ug/L	0.003	5	171	302	2
	Mn	55	0.072	ug/L	0.002	3	673	2891	2
	Co	59	0.004	ug/L	0.000	7	47	139	5
>	Ge	72		ug/L			685770	688721	0
	Ni	60	0.075	ug/L	0.003	3	17	342	3
	Ni	62	1.042	ug/L	0.527	50	137	796	41
	Cu	63	0.147	ug/L	0.032	21	147	1573	19
	Cu	65	0.096	ug/L	0.009	9	44	457	8
	Zn	66	1.252	ug/L	0.046	3	266	3628	3
	Zn	67	1.132	ug/L	0.043	3	39	550	3
	Zn	68	1.197	ug/L	0.021	1	255	2551	1
	As	75	0.001	ug/L	0.008	726	158	161	11
	As-1	75	0.045	ug/L	0.047	106	9961	10107	0
	Se	82	-0.012	ug/L	0.021	172	8	5	92
	Se	78	0.124	ug/L	0.162	130	10147	10276	0
	Mo	98	0.048	ug/L	0.005	9	10	267	9
	Y	89		ug/L			476646	481694	2
	Kr	83		ug/L			449	442	5
>	In	115		ug/L			953484	969192	1
	Ag	107	0.006	ug/L	0.001	19	13	68	16
	Cd	111	0.010	ug/L	0.002	15	88	133	5
	Cd	114	0.007	ug/L	0.000	5	30	113	5
	Sb	121	0.289	ug/L	0.036	12	44	3863	11
	Sb	123	0.290	ug/L	0 033	11	34	2939	10
	Ba	135	0.098	ug/L	0.002	2	12	416	2
	Ba	137	0.100	ug/L	0.003	2	27	736	1
>	Tb	159		ug/L			1136829	1127329	0
	Tl	205	0.059	ug/L	0.023	39	37	2137	38
	Pb	208	0.044	ug/L	0.002	4	262	2232	3
	Bi	209		ug/L			2635860	2626096	0
	Th	232	0.340	ug/L	0.021	6	82	15146	6
	U	238	0.008	ug/L	0.000	5	3	381	5

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 11:44:14
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1918124	1
	Be	9	50.367	ug/L	0.520	1	14	242021	0
	C	13		ug/L			127762	127828	2
	Cl	37		ug/L			4732762	5093634	3
>	Sc	45		ug/L			1351908	1391240	2
	V	51	47.736	ug/L	0.484	1	9535	1296029	1
	V-1	51	48.159	ug/L	0.790	1	76	1286308	1
	Cr	52	48.198	ug/L	0.391	0	28286	1124285	1
	Cr	53	49.662	ug/L	1.417	2	171	123935	2
	Mn	55	49.057	ug/L	0.992	2	673	1507147	3
	Co	59	47.242	ug/L	1.038	2	47	1025318	0
>	Ge	72		ug/L			685770	670902	1
	Ni	60	50.526	ug/L	0.845	1	17	214433	1
	Ni	62	49.999	ug/L	0.785	1	137	30928	1
	Cu	63	50.359	ug/L	0.599	1	147	476487	2
	Cu	65	50.489	ug/L	0.597	1	44	211997	2
	Zn	66	50.612	ug/L	1.498	2	266	132555	2
	Zn	67	50.371	ug/L	1.020	2	39	22161	0
	Zn	68	51.726	ug/L	1.451	2	255	96841	2
	As	75	51.074	ug/L	0 576	1	158	114042	0
	As-1	75	51.015	ug/L	0.684	1	9961	124651	0
	Se	82	52.081	ug/L	0.307	0	8	13156	1
	Se	78	51.320	ug/L	0.776	1	10147	44379	1
	Mo	98	51.167	ug/L	0.159	0	10	269317	1
	Y	89		ug/L			476646	480940	2
	Kr	83		ug/L			449	496	5
>	In	115		ug/L			953484	956593	1
	Ag	107	49.934	ug/L	1.484	2	13	476660	3
	Cd	111	49.544	ug/L	0.429	0	88	225227	1
	Cd	114	50.133	ug/L	0.359	0	30	571354	1
	Sb	121	50.249	ug/L	0.574	1	44	655113	0
	Sb	123	49.978	ug/L	0.610	1	34	495233	0
	Ba	135	49.945	ug/L	0.298	0	12	203593	1
	Ba	137	49.969	ug/L	0.680	1	27	348950	2
>	Tb	159		ug/L			1136829	1151261	1
	Tl	205	46.828	ug/L	0.465	0	37	1694814	0
	Pb	208	48.556	ug/L	0.460	0	262	2225401	0
	Bi	209		ug/L			2635860	2556267	0
	Th	232	50.614	ug/L	0.940	1	82	2288574	0
	U	238	50.625	ug/L	0.417	0	3	2446987	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 11:51:06
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1940348	0
	Be	9	0.002	ug/L	0.001	73	14	25	28
	C	13		ug/L			127762	133079	1
	Cl	37		ug/L			4732762	4916220	0
>	Sc	45		ug/L			1351908	1384303	2
	V	51	-0.009	ug/L	0.001	16	9535	9535	2
	V-1	51	0.005	ug/L	0.000	5	76	214	2
	Cr	52	-0.036	ug/L	0.004	11	28286	28159	2
	Cr	53	0.010	ug/L	0.005	52	171	201	7
	Mn	55	-0.003	ug/L	0.000	5	673	600	2
	Co	59	0.001	ug/L	0.000	16	47	68	6
>	Ge	72		ug/L			685770	676606	1
	Ni	60	0.002	ug/L	0.001	48	17	25	13
	Ni	62	0.238	ug/L	0.020	8	137	283	3
	Cu	63	0.008	ug/L	0.002	30	147	224	9
	Cu	65	-0.000	ug/L	0.001	5655	44	43	8
	Zn	66	-0.021	ug/L	0.009	44	266	207	10
	Zn	67	-0.004	ug/L	0 007	160	39	37	8
	Zn	68	-0.012	ug/L	0.007	60	255	229	4
	As	75	0.010	ug/L	0.014	136	158	178	16
	As-1	75	0.035	ug/L	0.093	269	9961	9904	1
	Se	82	0.005	ug/L	0.068	1380	8	10	171
	Se	78	0.109	ug/L	0.290	266	10147	10084	0
	Mo	98	0.012	ug/L	0.003	22	10	73	18
	Y	89		ug/L			476646	473860	1
	Kr	83		ug/L			449	462	7
>	In	115		ug/L			953484	956189	1
	Ag	107	0.002	ug/L	0.001	46	13	36	27
	Cd	111	0.002	ug/L	0.001	60	88	97	5
	Cd	114	0.001	ug/L	0.000	19	30	43	6
	Sb	121	0.088	ug/L	0.010	10	44	1193	9
	Sb	123	0.095	ug/L	0.013	13	34	972	11
	Ba	135	0.001	ug/L	0.001	94	12	15	17
	Ba	137	-0.000	ug/L	0.000	223	27	26	13
>	Tb	159		ug/L			1136829	1131410	1
	Tl	205	0.015	ug/L	0.007	42	37	588	40
	Pb	208	0.000	ug/L	0.001	246	262	274	11
	Bi	209		ug/L			2635860	2652331	1
	Th	232	0.214	ug/L	0.014	6	82	9609	7
	U	238	0.003	ug/L	0.000	10	3	147	10

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 11:55:15
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens. RSD
>	Li	6		ug/L			1864378	1928682	1
	Be	9	0.005	ug/L	0.001	10	14	39	7
	C	13		ug/L			127762	142074	2
	Cl	37		ug/L			4732762	4985451	1
>	Sc	45		ug/L			1351908	1404812	2
	V	51	0.004	ug/L	0.012	286	9535	10014	1
	V-1	51	0.009	ug/L	0.001	6	76	334	5
	Cr	52	0.003	ug/L	0.035	1028	28286	29459	0
	Cr	53	0.022	ug/L	0.012	55	171	233	14
	Mn	55	0.008	ug/L	0.002	19	673	952	3
	Co	59	0.001	ug/L	0.001	42	47	79	15
>	Ge	72		ug/L			685770	688127	1
	Ni	60	0.051	ug/L	0.002	3	17	239	4
	Ni	62	0.262	ug/L	0.061	23	137	304	13
	Cu	63	0.257	ug/L	0.004	1	147	2645	2
	Cu	65	0.256	ug/L	0.008	3	44	1147	2
	Zn	66	0.706	ug/L	0.029	4	266	2160	3
	Zn	67	0.612	ug/L	0.028	4	39	315	5
	Zn	68	0.702	ug/L	0.017	2	255	1600	2
	As	75	-0.005	ug/L	0.007	143	158	147	9
	As-1	75	0.028	ug/L	0.071	256	9961	10057	0
	Se	82	0.004	ug/L	0.013	313	8	10	34
	Se	78	0.112	ug/L	0 226	200	10147	10258	0
	Mo	98	0.025	ug/L	0.011	42	10	146	41
	Y	89		ug/L			476646	485318	1
	Kr	83		ug/L			449	450	3
>	In	115		ug/L			953484	960088	0
	Ag	107	0.002	ug/L	0.001	54	13	30	30
	Cd	111	0.003	ug/L	0.002	88	88	100	10
	Cd	114	0.001	ug/L	0.001	44	30	47	15
	Sb	121	0.037	ug/L	0.001	2	44	529	2
	Sb	123	0.035	ug/L	0.006	18	34	382	16
	Ba	135	0.006	ug/L	0.002	27	12	38	18
	Ba	137	0.007	ug/L	0.001	17	27	79	11
>	Tb	159		ug/L			1136829	1145482	1
	Tl	205	0.039	ug/L	0.017	44	37	1436	42
	Pb	208	0.015	ug/L	0.000	2	262	955	2
	Bi	209		ug/L			2635860	2639444	0
	Th	232	0.181	ug/L	0.017	9	82	8211	10
	U	238	0.001	ug/L	0.000	21	3	68	19

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 11:59:22
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens RSD
>	Li	6		ug/L			1864378	1946573	1
	Be	9	0.009	ug/L	0.002	25	14	60	17
	C	13		ug/L			127762	157365	1
	Cl	37		ug/L			4732762	5298083	2
>	Sc	45		ug/L			1351908	1432472	1
	V	51	1.148	ug/L	0.034	2	9535	41955	0
	V-1	51	1.230	ug/L	0.038	3	76	33912	1
	Cr	52	0.703	ug/L	0.025	3	28286	46423	0
	Cr	53	0.971	ug/L	0.029	2	171	2673	1
	Mn	55	114.574	ug/L	2.397	2	673	3622717	1
	Co	59	0.159	ug/L	0.011	6	47	3600	5
>	Ge	72		ug/L			685770	688757	0
	Ni	60	1.507	ug/L	0.052	3	17	6582	2
	Ni	62	1.577	ug/L	0.014	0	137	1135	1
	Cu	63	3.010	ug/L	0.021	0	147	29371	0
	Cu	65	2.912	ug/L	0.056	1	44	12594	2
	Zn	66	4.311	ug/L	0.050	1	266	11838	1
	Zn	67	4.568	ug/L	0.083	1	39	2099	2
	Zn	68	5.012	ug/L	0.086	1	255	9866	1
	As	75	1.283	ug/L	0.020	1	158	3097	2
	As-1	75	1.303	ug/L	0.006	0	9961	13018	0
	Se	82	0.113	ug/L	0.056	49	8	38	38
	Se	78	0.237	ug/L	0.038	16	10147	10354	0
	Mo	98	0.330	ug/L	0.015	4	10	1793	3
	Y	89		ug/L			476646	493161	1
	Kr	83		ug/L			449	468	1
>	In	115		ug/L			953484	975706	0
	Ag	107	0.005	ug/L	0.001	12	13	63	9
	Cd	111	0.014	ug/L	0.005	34	88	157	14
	Cd	114	0.009	ug/L	0.001	7	30	136	5
	Sb	121	0.231	ug/L	0.007	2	44	3117	2
	Sb	123	0.222	ug/L	0.001	0	34	2280	0
	Ba	135	10.975	ug/L	0.118	1	12	45640	1
	Ba	137	10.966	ug/L	0.074	0	27	78126	0
>	Tb	159		ug/L			1136829	1173591	0
	Tl	205	0.034	ug/L	0.009	27	37	1291	27
	Pb	208	0.522	ug/L	0.003	0	262	24654	0
	Bi	209		ug/L			2635860	2576514	0
	Th	232	0.183	ug/L	0.029	16	82	8534	15
	U	238	0.021	ug/L	0.000	1	3	1034	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 12:03:29
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens RSD
>	**Li**	**6**		ug/L			1864378	1947191	1
	Be	**9**	**0.007**	ug/L	0.001	17	14	49	10
	C	**13**		ug/L			127762	150197	3
	Cl	**37**		ug/L			4732762	5134179	4
>	**Sc**	**45**		ug/L			1351908	1456484	1
	V	**51**	**1.091**	ug/L	0.015	1	9535	41058	0
	V-1	**51**	**1.176**	ug/L	0.017	1	76	32966	0
	Cr	**52**	**0.617**	ug/L	0.006	0	28286	45153	1
	Cr	**53**	**0.893**	ug/L	0.010	1	171	2514	0
	Mn	**55**	**108.782**	ug/L	2.743	2	673	3497136	1
	Co	**59**	**0.158**	ug/L	0.003	2	47	3639	1
>	**Ge**	**72**		ug/L			685770	690457	0
	Ni	**60**	**1.453**	ug/L	0.025	1	17	6364	1
	Ni	**62**	**1.482**	ug/L	0.031	2	137	1078	1
	Cu	**63**	**2.820**	ug/L	0.034	1	147	27595	0
	Cu	**65**	**2.701**	ug/L	0.026	0	44	11714	1
	Zn	**66**	**4.152**	ug/L	0.051	1	266	11440	1
	Zn	**67**	**4.353**	ug/L	0.121	2	39	2007	2
	Zn	**68**	**4.813**	ug/L	0.066	1	255	9507	0
	As	**75**	**1.235**	ug/L	0.016	1	158	2993	1
	As-1	**75**	**1.249**	ug/L	0.045	3	9961	12924	1
	Se	**82**	**0.071**	ug/L	0.051	71	8	27	48
	Se	**78**	**0.169**	ug/L	0.093	55	10147	10333	0
	Mo	**98**	**0.308**	ug/L	0.008	2	10	1679	2
	Y	**89**		ug/L			476646	486816	1
	Kr	**83**		ug/L			449	464	1
>	**In**	**115**		ug/L			953484	969893	0
	Ag	**107**	**0.005**	ug/L	0.001	29	13	60	21
	Cd	**111**	**0.009**	ug/L	0.002	26	88	131	8
	Cd	**114**	**0.009**	ug/L	0.001	14	30	129	11
	Sb	**121**	**0.223**	ug/L	0.002	0	44	2994	1
	Sb	**123**	**0.216**	ug/L	0.005	2	34	2201	2
	Ba	**135**	**10.709**	ug/L	0.143	1	12	44268	0
	Ba	**137**	**10.757**	ug/L	0.055	0	27	76186	0
>	**Tb**	**159**		ug/L			1136829	1157543	0
	Tl	**205**	**0.013**	ug/L	0.003	20	37	529	18
	Pb	**208**	**0.471**	ug/L	0.003	0	262	21950	0
	Bi	**209**		ug/L			2635860	2558012	0
	Th	**232**	**0.093**	ug/L	0.002	2	82	4326	2
	U	**238**	**0.021**	ug/L	0.000	1	3	1014	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 12:07:37
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	**Li**	**6**		ug/L			1864378	1914167	0
	Be	**9**	**25.253**	ug/L	0.648	2	14	121115	2
	C	**13**		ug/L			127762	150552	1
	Cl	**37**		ug/L			4732762	5290014	1
>	**Sc**	**45**		ug/L			1351908	1431266	0
	V	**51**	**25.918**	ug/L	0.425	1	9535	728563	1
	V-1	**51**	**26.201**	ug/L	0.551	2	76	720026	1
	Cr	**52**	**24.990**	ug/L	0.556	2	28286	614191	2
	Cr	**53**	**25.931**	ug/L	0 445	1	171	66673	0
	Mn	**55**	**138.425**	ug/L	1.445	1	673	4373452	0
	Co	**59**	**24.407**	ug/L	0.630	2	47	545094	2
>	**Ge**	**72**		ug/L			685770	691212	0
	Ni	**60**	**27.693**	ug/L	0.324	1	17	121104	0
	Ni	**62**	**27.102**	ug/L	0.164	0	137	17338	1
	Cu	**63**	**29.467**	ug/L	1.065	3	147	287250	3
	Cu	**65**	**28.731**	ug/L	0.517	1	44	124302	2
	Zn	**66**	**82.881**	ug/L	1.050	1	266	223499	0
	Zn	**67**	**76.072**	ug/L	0.703	0	39	34467	0
	Zn	**68**	**80.894**	ug/L	1.007	1	255	155903	0
	As	**75**	**26.423**	ug/L	0.265	1	158	60869	1
	As-1	**75**	**26.724**	ug/L	0.489	1	9961	72061	1
	Se	**82**	**77.411**	ug/L	0.179	0	8	20144	0
	Se	**78**	**75.845**	ug/L	0.850	1	10147	62689	0
	Mo	**98**	**0.325**	ug/L	0.017	5	10	1772	4
	Y	**89**		ug/L			476646	485004	1
	Kr	**83**		ug/L			449	474	5
>	**In**	**115**		ug/L			953484	974754	0
	Ag	**107**	**25.755**	ug/L	0.414	1	13	250501	1
	Cd	**111**	**24.495**	ug/L	0.279	1	88	113525	1
	Cd	**114**	**24.466**	ug/L	0.385	1	30	284154	1
	Sb	**121**	**0.217**	ug/L	0.012	5	44	2930	5
	Sb	**123**	**0.216**	ug/L	0.006	2	34	2211	2
	Ba	**135**	**36.594**	ug/L	0.419	1	12	152005	1
	Ba	**137**	**36.874**	ug/L	0 239	0	27	262400	0
>	**Tb**	**159**		ug/L			1136829	1158150	0
	Tl	**205**	**25.004**	ug/L	0.199	0	37	910465	0
	Pb	**208**	**26.097**	ug/L	0.157	0	262	1203453	0
	Bi	**209**		ug/L			2635860	2520701	0
	Th	**232**	**21.872**	ug/L	0.268	1	82	995084	0
	U	**238**	**24.202**	ug/L	0.189	0	3	1176890	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R EDUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 12:11:44
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas Intens.	Intens. RSD
>	**Li**	**6**		ug/L			1864378	1948078	1
	Be	**9**	**0.029**	ug/L	0.003	11	14	157	10
	C	**13**		ug/L			127762	148510	1
	Cl	**37**		ug/L			4732762	5292972	4
>	**Sc**	**45**		ug/L			1351908	1447413	1
	V	**51**	**0.491**	ug/L	0.018	3	9535	23979	0
	V-1	**51**	**0.581**	ug/L	0.012	1	76	16221	0
	Cr	**52**	**0.408**	ug/L	0.045	11	28286	39929	1
	Cr	**53**	**0.713**	ug/L	0.026	3	171	2031	2
	Mn	**55**	**2.656**	ug/L	0.026	0	673	85576	0
	Co	**59**	**0.050**	ug/L	0.001	1	47	1170	3
>	**Ge**	**72**		ug/L			685770	685957	1
	Ni	**60**	**1.103**	ug/L	0.012	1	17	4805	0
	Ni	**62**	**1.219**	ug/L	0.049	3	137	905	2
	Cu	**63**	**3.325**	ug/L	0.032	0	147	32304	0
	Cu	**65**	**3.162**	ug/L	0.015	0	44	13614	1
	Zn	**66**	**6.879**	ug/L	0.183	2	266	18651	1
	Zn	**67**	**6.547**	ug/L	0.116	1	39	2979	0
	Zn	**68**	**7.236**	ug/L	0.078	1	255	14073	0
	As	**75**	**0.840**	ug/L	0.017	1	158	2074	2
	As-1	**75**	**0.834**	ug/L	0.068	8	9961	11882	0
	Se	**82**	**0.087**	ug/L	0.040	45	8	31	33
	Se	**78**	**0.109**	ug/L	0.206	188	10147	10224	0
	Mo	**98**	**0.305**	ug/L	0.006	1	10	1649	2
	Y	**89**		ug/L			476646	478154	1
	Kr	**83**		ug/L			449	467	8
>	**In**	**115**		ug/L			953484	968787	0
	Ag	**107**	**0.004**	ug/L	0.003	62	13	56	46
	Cd	**111**	**0.010**	ug/L	0.005	48	88	136	16
	Cd	**114**	**0.005**	ug/L	0.002	32	30	90	21
	Sb	**121**	**0.193**	ug/L	0.006	3	44	2588	3
	Sb	**123**	**0.196**	ug/L	0.002	1	34	1998	0
	Ba	**135**	**7.607**	ug/L	0.136	1	12	31414	1
	Ba	**137**	**7.565**	ug/L	0.064	0	27	53522	0
>	**Tb**	**159**		ug/L			1136829	1144627	0
	Tl	**205**	**0.013**	ug/L	0.004	28	37	488	25
	Pb	**208**	**0.094**	ug/L	0.003	3	262	4539	2
	Bi	**209**		ug/L			2635860	2522362	0
	Th	**232**	**0.196**	ug/L	0.026	13	82	8880	13
	U	**238**	**0.019**	ug/L	0.002	11	3	896	11

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R E REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 12:15:51
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas Intens	Intens RSD
>	**Li**	**6**		ug/L			1864378	1924848	1
	Be	**9**	**0.003**	ug/L	0.002	53	14	28	26
	C	**13**		ug/L			127762	153331	1
	Cl	**37**		ug/L			4732762	5102493	2
>	**Sc**	**45**		ug/L			1351908	1406491	3
	V	**51**	**0.500**	ug/L	0.031	6	9535	23533	1
	V-1	**51**	**0.591**	ug/L	0.031	5	76	16023	1
	Cr	**52**	**0.342**	ug/L	0.025	7	28286	37282	2
	Cr	**53**	**0.649**	ug/L	0.025	3	171	1811	0
	Mn	**55**	**2.755**	ug/L	0.126	4	673	86125	2
	Co	**59**	**0.047**	ug/L	0.001	2	47	1072	2
>	**Ge**	**72**		ug/L			685770	675381	2
	Ni	**60**	**1.110**	ug/L	0.036	3	17	4755	0
	Ni	**62**	**1.158**	ug/L	0.040	3	137	853	3
	Cu	**63**	**2.131**	ug/L	0.042	1	147	20426	1
	Cu	**65**	**1.956**	ug/L	0.040	2	44	8306	1
	Zn	**66**	**6.766**	ug/L	0.024	0	266	18068	2
	Zn	**67**	**6.479**	ug/L	0.266	4	39	2901	1
	Zn	**68**	**7.333**	ug/L	0.246	3	255	14030	0
	As	**75**	**0.838**	ug/L	0.018	2	158	2037	1
	As-1	**75**	**0.895**	ug/L	0.085	9	9961	11835	1
	Se	**82**	**0.038**	ug/L	0.030	77	8	18	38
	Se	**78**	**0.296**	ug/L	0.252	84	10147	10190	1
	Mo	**98**	**0.276**	ug/L	0.017	6	10	1472	3
	Y	**89**		ug/L			476646	477891	1
	Kr	**83**		ug/L			449	480	3
>	**In**	**115**		ug/L			953484	970856	0
	Ag	**107**	**0.003**	ug/L	0.001	39	13	45	26
	Cd	**111**	**0.008**	ug/L	0.002	21	88	126	6
	Cd	**114**	**0.004**	ug/L	0.001	29	30	75	18
	Sb	**121**	**0.194**	ug/L	0.006	2	44	2615	2
	Sb	**123**	**0.191**	ug/L	0.003	1	34	1958	2
	Ba	**135**	**7.548**	ug/L	0.065	0	12	31235	0
	Ba	**137**	**7.546**	ug/L	0.115	1	27	53506	1
>	**Tb**	**159**		ug/L			1136829	1143240	1
	Tl	**205**	**0.009**	ug/L	0.001	14	37	346	12
	Pb	**208**	**0.094**	ug/L	0.001	1	262	4546	1
	Bi	**209**		ug/L			2635860	2538453	2
	Th	**232**	**0.070**	ug/L	0.001	1	82	3231	0
	U	**238**	**0.013**	ug/L	0.000	2	3	638	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R ESPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 12:19:58
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1938814	1
	Be	9	24.963	ug/L	0.773	3	14	121225	1
	C	13		ug/L			127762	152893	1
	Cl	37		ug/L			4732762	5142794	2
>	Sc	45		ug/L			1351908	1423184	1
	V	51	25.247	ug/L	0.358	1	9535	705912	0
	V-1	51	25.518	ug/L	0.471	1	76	697260	0
	Cr	52	24.921	ug/L	0.460	1	28286	609001	1
	Cr	53	25.837	ug/L	0.530	2	171	66050	0
	Mn	55	28.075	ug/L	0.926	3	673	882314	2
	Co	59	24.477	ug/L	0.854	3	47	543418	1
>	Ge	72		ug/L			685770	677496	1
	Ni	60	27.875	ug/L	0.440	1	17	119470	0
	Ni	62	26.943	ug/L	0.501	1	137	16894	1
	Cu	63	28.261	ug/L	0.641	2	147	270030	1
	Cu	65	28.753	ug/L	0.447	1	44	121937	2
	Zn	66	86.553	ug/L	2 066	2	266	228726	1
	Zn	67	78.287	ug/L	0.782	0	39	34769	2
	Zn	68	84.307	ug/L	1.397	1	255	159236	0
	As	75	26.165	ug/L	0.764	2	158	59068	2
	As-1	75	26.394	ug/L	0.841	3	9961	69868	1
	Se	82	77.774	ug/L	1.090	1	8	19834	0
	Se	78	75.955	ug/L	1.629	2	10147	61512	0
	Mo	98	0.285	ug/L	0.003	0	10	1526	0
	Y	89		ug/L			476646	469157	1
	Kr	83		ug/L			449	475	2
>	In	115		ug/L			953484	961749	0
	Ag	107	25.731	ug/L	0.347	1	13	246931	1
	Cd	111	24.437	ug/L	0.347	1	88	111743	1
	Cd	114	24.306	ug/L	0.346	1	30	278532	1
	Sb	121	0.197	ug/L	0.001	0	44	2624	0
	Sb	123	0.190	ug/L	0.003	1	34	1927	1
	Ba	135	33.644	ug/L	0.667	1	12	137892	1
	Ba	137	33.648	ug/L	0.219	0	27	236250	0
>	Tb	159		ug/L			1136829	1134371	0
	Tl	205	25.266	ug/L	0.096	0	37	901136	0
	Pb	208	26.001	ug/L	0.080	0	262	1174410	0
	Bi	209		ug/L			2635860	2509327	0
	Th	232	24.052	ug/L	0.089	0	82	1071814	0
	U	238	24.557	ug/L	0.143	0	3	1169629	0

H12-712

VR80R

ICP-MS Quantitative Analysis - Summary Report

Sample ID: ~~VR80~~ B REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 12:24:06
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	**Li**	**6**		ug/L			1864378	1926724	1
	Be	**9**	**0.007**	ug/L	0.000	1	14	47	2
	C	**13**		ug/L			127762	148681	1
	Cl	**37**		ug/L			4732762	5249053	3
>	**Sc**	**45**		ug/L			1351908	1426814	0
	V	**51**	**0.943**	ug/L	0.009	0	9535	36135	0
	V-1	**51**	**1.047**	ug/L	0.015	1	76	28771	0
	Cr	**52**	**0.458**	ug/L	0.021	4	28286	40526	1
	Cr	**53**	**0.799**	ug/L	0.008	0	171	2224	0
	Mn	**55**	**30.865**	ug/L	0.804	2	673	972626	2
	Co	**59**	**0.090**	ug/L	0.001	1	47	2058	1
>	**Ge**	**72**		ug/L			685770	682321	0
	Ni	**60**	**1.189**	ug/L	0.010	0	17	5151	0
	Ni	**62**	**1.226**	ug/L	0.029	2	137	905	2
	Cu	**63**	**2.633**	ug/L	0.024	0	147	25476	0
	Cu	**65**	**2.461**	ug/L	0.012	0	44	10548	1
	Zn	**66**	**2.636**	ug/L	0.072	2	266	7272	1
	Zn	**67**	**2.977**	ug/L	0.149	5	39	1368	4
	Zn	**68**	**3.374**	ug/L	0.068	2	255	6661	1
	As	**75**	**1.194**	ug/L	0.013	1	158	2864	1
	As-1	**75**	**1.182**	ug/L	0.071	6	9961	12617	0
	Se	**82**	**0.037**	ug/L	0 023	64	8	18	32
	Se	**78**	**0.062**	ug/L	0.275	442	10147	10137	0
	Mo	**98**	**0.299**	ug/L	0.009	2	10	1608	1
	Y	**89**		ug/L			476646	470170	1
	Kr	**83**		ug/L			449	470	6
>	**In**	**115**		ug/L			953484	950316	1
	Ag	**107**	**0.008**	ug/L	0.001	13	13	86	10
	Cd	**111**	**0.010**	ug/L	0.001	12	88	134	4
	Cd	**114**	**0.006**	ug/L	0.000	8	30	98	4
	Sb	**121**	**0.191**	ug/L	0.001	0	44	2519	1
	Sb	**123**	**0.196**	ug/L	0.004	1	34	1964	0
	Ba	**135**	**9.039**	ug/L	0.177	1	12	36607	1
	Ba	**137**	**9.116**	ug/L	0.123	1	27	63259	1
>	**Tb**	**159**		ug/L			1136829	1143621	0
	Tl	**205**	**0.011**	ug/L	0.001	11	37	423	10
	Pb	**208**	**0.271**	ug/L	0.006	2	262	12616	1
	Bi	**209**		ug/L			2635860	2529805	0
	Th	**232**	**0.220**	ug/L	0.027	12	82	9954	12
	U	**238**	**0.023**	ug/L	0.001	4	3	1125	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R C REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 12:29:17
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens	Meas Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1918746	2
	Be	9	0.007	ug/L	0.001	13	14	49	8
	C	13		ug/L			127762	148310	1
	Cl	37		ug/L			4732762	5111365	2
>	Sc	45		ug/L			1351908	1415742	2
	V	51	0.965	ug/L	0.025	2	9535	36424	0
	V-1	51	1.069	ug/L	0.028	2	76	29120	0
	Cr	52	0.451	ug/L	0.010	2	28286	40049	3
	Cr	53	0.793	ug/L	0 014	1	171	2189	3
	Mn	55	30.795	ug/L	0.373	1	673	962825	1
	Co	59	0.091	ug/L	0.002	1	47	2056	2
>	Ge	72		ug/L			685770	681087	1
	Ni	60	1.185	ug/L	0.021	1	17	5122	0
	Ni	62	1.228	ug/L	0 004	0	137	904	1
	Cu	63	3.169	ug/L	0.074	2	147	30567	1
	Cu	65	3.102	ug/L	0.057	1	44	13259	0
	Zn	66	2.943	ug/L	0.024	0	266	8076	2
	Zn	67	3.311	ug/L	0.069	2	39	1515	2
	Zn	68	3.554	ug/L	0.082	2	255	6990	1
	As	75	1.236	ug/L	0.058	4	158	2955	2
	As-1	75	1.314	ug/L	0.125	9	9961	12896	0
	Se	82	0.081	ug/L	0 027	33	8	29	24
	Se	78	0.392	ug/L	0.227	57	10147	10344	0
	Mo	98	0.302	ug/L	0.012	3	10	1621	2
	Y	89		ug/L			476646	473948	0
	Kr	83		ug/L			449	457	5
>	In	115		ug/L			953484	956918	0
	Ag	107	0.005	ug/L	0.000	8	13	60	6
	Cd	111	0.007	ug/L	0.003	48	88	118	12
	Cd	114	0.003	ug/L	0.001	19	30	65	10
	Sb	121	0.198	ug/L	0.003	1	44	2625	1
	Sb	123	0.196	ug/L	0.002	0	34	1978	0
	Ba	135	9.080	ug/L	0.138	1	12	37037	1
	Ba	137	8.965	ug/L	0.045	0	27	62649	0
>	Tb	159		ug/L			1136829	1151101	0
	Tl	205	0.009	ug/L	0.001	9	37	348	8
	Pb	208	0.274	ug/L	0.002	0	262	12816	0
	Bi	209		ug/L			2635860	2519885	0
	Th	232	0.079	ug/L	0.001	0	82	3665	0
	U	238	0.019	ug/L	0.001	4	3	942	4

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R MB1SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 12:33:24
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1880503	1
	Be	9	24.860	ug/L	0.956	3	14	117110	3
	C	13		ug/L			127762	142391	2
	Cl	37		ug/L			4732762	5078430	2
>	Sc	45		ug/L			1351908	1366169	2
	V	51	24.115	ug/L	0.649	2	9535	647442	0
	V-1	51	24.242	ug/L	0 467	1	76	635761	0
	Cr	52	24.631	ug/L	1.405	5	28286	577632	2
	Cr	53	25.084	ug/L	0.884	3	171	61537	1
	Mn	55	25.169	ug/L	0.686	2	673	759231	0
	Co	59	25.203	ug/L	0.378	1	47	537185	1
>	Ge	72		ug/L			685770	685361	0
	Ni	60	25.713	ug/L	0.700	2	17	111488	2
	Ni	62	25.089	ug/L	1.038	4	137	15921	3
	Cu	63	25.723	ug/L	0.382	1	147	248668	0
	Cu	65	25.629	ug/L	0.506	1	44	109934	1
	Zn	66	78.869	ug/L	1.500	1	266	210893	1
	Zn	67	71.048	ug/L	0 813	1	39	31921	1
	Zn	68	77.412	ug/L	1 207	1	255	147944	1
	As	75	24.137	ug/L	0.449	1	158	55140	1
	As-1	75	24.175	ug/L	0.466	1	9961	65583	0
	Se	82	77.596	ug/L	0.914	1	8	20020	0
	Se	78	75.065	ug/L	0.978	1	10147	61623	0
	Mo	98	0.010	ug/L	0.002	22	10	64	19
	Y	89		ug/L			476646	475062	0
	Kr	83		ug/L			449	468	1
>	In	115		ug/L			953484	960529	1
	Ag	107	26.105	ug/L	1.045	4	13	250100	2
	Cd	111	24.670	ug/L	0.445	1	88	112643	0
	Cd	114	24.095	ug/L	0.111	0	30	275763	1
	Sb	121	0.006	ug/L	0.001	16	44	122	9
	Sb	123	0.007	ug/L	0 000	1	34	104	0
	Ba	135	24.775	ug/L	0 397	1	12	101397	0
	Ba	137	24.918	ug/L	0.400	1	27	174713	0
>	Tb	159		ug/L			1136829	1140233	0
	Tl	205	24.624	ug/L	0.073	0	37	882756	0
	Pb	208	25.330	ug/L	0.097	0	262	1150012	0
	Bi	209		ug/L			2635860	2642924	0
	Th	232	23.241	ug/L	0.212	0	82	1040982	0
	U	238	23.281	ug/L	0.090	0	3	1114588	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 12:37:32
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1875308	2
	Be	9	50.429	ug/L	1.784	3	14	236817	1
	C	13		ug/L			127762	130644	2
	Cl	37		ug/L			4732762	5206799	2
>	Sc	45		ug/L			1351908	1377079	0
	V	51	47.447	ug/L	0.457	0	9535	1275347	1
	V-1	51	47.818	ug/L	0.224	0	76	1264460	1
	Cr	52	47.258	ug/L	0.939	1	28286	1091877	2
	Cr	53	48.524	ug/L	0.146	0	171	119900	0
	Mn	55	47.400	ug/L	0.808	1	673	1441330	1
	Co	59	47.843	ug/L	1.028	2	47	1028081	2
>	Ge	72		ug/L			685770	673776	2
	Ni	60	49.739	ug/L	0.987	1	17	211964	0
	Ni	62	48.089	ug/L	0.769	1	137	29877	1
	Cu	63	50.501	ug/L	1.491	2	147	479646	1
	Cu	65	49.948	ug/L	1.842	3	44	210530	2
	Zn	66	50.424	ug/L	2.245	4	266	132570	2
	Zn	67	50.599	ug/L	1.122	2	39	22356	2
	Zn	68	50.519	ug/L	1.196	2	255	94973	0
	As	75	49.946	ug/L	1.174	2	158	111983	1
	As-1	75	49.924	ug/L	1.258	2	9961	122696	0
	Se	82	50.934	ug/L	1.022	2	8	12919	0
	Se	78	50.314	ug/L	1.346	2	10147	43882	0
	Mo	98	49.092	ug/L	1.635	3	10	259380	1
	Y	89		ug/L			476646	463923	0
	Kr	83		ug/L			449	499	1
>	In	115		ug/L			953484	944052	0
	Ag	107	51.071	ug/L	1.464	2	13	481109	3
	Cd	111	50.151	ug/L	0.205	0	88	225018	1
	Cd	114	50.274	ug/L	0.194	0	30	565472	0
	Sb	121	50.349	ug/L	0.077	0	44	647901	0
	Sb	123	49.916	ug/L	0.129	0	34	488199	0
	Ba	135	49.327	ug/L	0.283	0	12	198443	1
	Ba	137	49.591	ug/L	0.298	0	27	341773	0
>	Tb	159		ug/L			1136829	1131245	1
	Tl	205	47.480	ug/L	0.574	1	37	1688563	0
	Pb	208	48.794	ug/L	0.583	1	262	2197440	0
	Bi	209		ug/L			2635860	2536936	0
	Th	232	51.567	ug/L	0.737	1	82	2291219	0
	U	238	51.298	ug/L	0.831	1	3	2436298	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 12:44:25
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc RSD	Blank Intens.	Meas. Intens	Intens. RSD
>	Li	6		ug/L			1864378	1840129	1
	Be	9	0.001	ug/L	0.001	157	14	18	33
	C	13		ug/L			127762	132059	1
	Cl	37		ug/L			4732762	5067719	2
>	Sc	45		ug/L			1351908	1354601	3
	V	51	-0.009	ug/L	0.005	54	9535	9332	4
	V-1	51	0.004	ug/L	0.000	6	76	184	3
	Cr	52	-0.036	ug/L	0.017	47	28286	27557	4
	Cr	53	0.007	ug/L	0.001	16	171	188	4
	Mn	55	-0.002	ug/L	0.001	37	673	618	5
	Co	59	0.001	ug/L	0.001	52	47	68	16
>	Ge	72		ug/L			685770	665116	2
	Ni	60	0.002	ug/L	0.002	104	17	24	31
	Ni	62	0.237	ug/L	0.044	18	137	278	9
	Cu	63	0.011	ug/L	0.000	2	147	243	2
	Cu	65	0.001	ug/L	0.002	242	44	46	19
	Zn	66	-0.013	ug/L	0.012	91	266	224	12
	Zn	67	-0.003	ug/L	0.006	223	39	37	4
	Zn	68	-0.005	ug/L	0.013	249	255	238	7
	As	75	0.011	ug/L	0.013	114	158	177	13
	As-1	75	0.140	ug/L	0.117	83	9961	9970	0
	Se	82	-0.014	ug/L	0.040	290	8	5	190
	Se	78	0.450	ug/L	0.377	83	10147	10137	0
	Mo	98	0.010	ug/L	0.002	18	10	60	13
	Y	89		ug/L			476646	465555	1
	Kr	83		ug/L			449	462	4
>	In	115		ug/L			953484	935979	2
	Ag	107	0.003	ug/L	0.001	19	13	42	15
	Cd	111	0.005	ug/L	0.004	75	88	107	15
	Cd	114	0.001	ug/L	0.001	45	30	42	14
	Sb	121	0.067	ug/L	0.007	11	44	894	9
	Sb	123	0.065	ug/L	0.008	11	34	664	10
	Ba	135	0.001	ug/L	0.001	63	12	17	18
	Ba	137	0.000	ug/L	0.001	167	27	30	16
>	Tb	159		ug/L			1136829	1105964	0
	Tl	205	0.006	ug/L	0.002	33	37	241	28
	Pb	208	0.001	ug/L	0.000	70	262	285	7
	Bi	209		ug/L			2635860	2587764	2
	Th	232	0.193	ug/L	0.025	12	82	8445	12
	U	238	0.003	ug/L	0.001	15	3	160	15

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R MB2 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 12:48:33
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1935655	1
	Be	9	0.003	ug/L	0.001	24	14	31	14
	C	13		ug/L			127762	142491	0
	Cl	37		ug/L			4732762	5003585	0
>	Sc	45		ug/L			1351908	1396524	1
	V	51	0.011	ug/L	0.012	108	9535	10154	3
	V-1	51	0.010	ug/L	0.000	3	76	353	1
	Cr	52	0.043	ug/L	0.038	87	28286	30195	2
	Cr	53	0.040	ug/L	0.005	13	171	277	4
	Mn	55	0.365	ug/L	0.004	1	673	11946	1
	Co	59	0.002	ug/L	0.000	19	47	92	10
>	Ge	72		ug/L			685770	683715	0
	Ni	60	0.048	ug/L	0.002	4	17	227	4
	Ni	62	0.274	ug/L	0.026	9	137	309	5
	Cu	63	0.160	ug/L	0.004	2	147	1693	2
	Cu	65	0.162	ug/L	0.009	5	44	735	5
	Zn	66	2.926	ug/L	0.015	0	266	8060	0
	Zn	67	2.688	ug/L	0 062	2	39	1242	1
	Zn	68	2.882	ug/L	0.015	0	255	5739	0
	As	75	-0.005	ug/L	0.003	61	158	146	4
	As-1	75	0.069	ug/L	0.034	48	9961	10090	0
	Se	82	-0.028	ug/L	0 064	227	8	1	923
	Se	78	0.236	ug/L	0.122	51	10147	10278	0
	Mo	98	0.010	ug/L	0.004	41	10	65	34
	Y	89		ug/L			476646	473794	1
	Kr	83		ug/L			449	461	10
>	In	115		ug/L			953484	977874	0
	Ag	107	0.004	ug/L	0.003	80	13	50	58
	Cd	111	0.009	ug/L	0.002	20	88	131	6
	Cd	114	0.003	ug/L	0.003	101	30	64	52
	Sb	121	0.024	ug/L	0.001	5	44	364	4
	Sb	123	0.024	ug/L	0.002	9	34	280	7
	Ba	135	0.041	ug/L	0.002	4	12	182	4
	Ba	137	0.041	ug/L	0.005	11	27	320	11
>	Tb	159		ug/L			1136829	1136130	0
	Tl	205	0.011	ug/L	0.002	21	37	423	18
	Pb	208	0.004	ug/L	0.001	30	262	456	12
	Bi	209		ug/L			2635860	2626900	0
	Th	232	0.193	ug/L	0.031	16	82	8705	15
	U	238	0.002	ug/L	0.001	33	3	93	31

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT87 MB1 REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 12:52:40
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	**Li**	**6**		ug/L			1864378	1891810	0
	Be	**9**	**0.004**	ug/L	0.001	14	14	33	8
	C	**13**		ug/L			127762	143647	1
	Cl	**37**		ug/L			4732762	5095027	2
>	**Sc**	**45**		ug/L			1351908	1370898	0
	V	**51**	**0.008**	ug/L	0.011	145	9535	9871	2
	V-1	**51**	**0.010**	ug/L	0.001	7	76	332	5
	Cr	**52**	**0.023**	ug/L	0.030	127	28286	29204	2
	Cr	**53**	**0.031**	ug/L	0.009	30	171	249	9
	Mn	**55**	**0.039**	ug/L	0.001	1	673	1864	1
	Co	**59**	**0.003**	ug/L	0.000	16	47	102	8
>	**Ge**	**72**		ug/L			685770	670880	0
	Ni	**60**	**0.020**	ug/L	0.003	12	17	100	10
	Ni	**62**	**0.240**	ug/L	0.030	12	137	282	6
	Cu	**63**	**0.144**	ug/L	0.001	0	147	1509	1
	Cu	**65**	**0.143**	ug/L	0.004	2	44	645	2
	Zn	**66**	**11.846**	ug/L	0.157	1	266	31229	1
	Zn	**67**	**10.753**	ug/L	0.026	0	39	4761	0
	Zn	**68**	**11.479**	ug/L	0.251	2	255	21686	1
	As	**75**	**0.004**	ug/L	0.014	306	158	164	18
	As-1	**75**	**0.112**	ug/L	0.010	9	9961	9997	0
	Se	**82**	**0.027**	ug/L	0.038	143	8	15	62
	Se	**78**	**0.375**	ug/L	0.056	14	10147	10178	0
	Mo	**98**	**0.006**	ug/L	0.001	11	10	40	8
	Y	**89**		ug/L			476646	471941	1
	Kr	**83**		ug/L			449	430	4
>	**In**	**115**		ug/L			953484	956678	0
	Ag	**107**	**0.002**	ug/L	0.001	31	13	30	16
	Cd	**111**	**0.004**	ug/L	0.002	60	88	105	9
	Cd	**114**	**0.002**	ug/L	0.000	17	30	48	7
	Sb	**121**	**0.014**	ug/L	0.002	14	44	226	12
	Sb	**123**	**0.014**	ug/L	0.002	17	34	175	14
	Ba	**135**	**0.035**	ug/L	0.002	5	12	155	5
	Ba	**137**	**0.039**	ug/L	0.010	26	27	301	23
>	**Tb**	**159**		ug/L			1136829	1134441	1
	Tl	**205**	**0.004**	ug/L	0.001	22	37	197	16
	Pb	**208**	**0.008**	ug/L	0.000	1	262	610	0
	Bi	**209**		ug/L			2635860	2606336	0
	Th	**232**	**0.053**	ug/L	0.003	6	82	2456	4
	U	**238**	**0.001**	ug/L	0.000	4	3	65	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R D REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 12:56:47
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1917562	2
	Be	9	0.004	ug/L	0.002	52	14	33	26
	C	13		ug/L			127762	153067	4
	Cl	37		ug/L			4732762	5243410	2
>	Sc	45		ug/L			1351908	1428642	1
	V	51	0.594	ug/L	0.031	5	9535	26506	1
	V-1	51	0.647	ug/L	0.016	2	76	17814	1
	Cr	52	0.257	ug/L	0.039	15	28286	35887	1
	Cr	53	0.428	ug/L	0.023	5	171	1275	5
	Mn	55	19.881	ug/L	0.345	1	673	627514	1
	Co	59	0.052	ug/L	0.002	4	47	1200	2
>	Ge	72		ug/L			685770	686948	1
	Ni	60	0.746	ug/L	0.040	5	17	3258	3
	Ni	62	0.809	ug/L	0.066	8	137	648	5
	Cu	63	1.551	ug/L	0.020	1	147	15163	0
	Cu	65	1.415	ug/L	0.039	2	44	6124	2
	Zn	66	1.875	ug/L	0.010	0	266	5285	1
	Zn	67	2.078	ug/L	0.101	4	39	973	2
	Zn	68	2.303	ug/L	0.034	1	255	4659	0
	As	75	0.933	ug/L	0.043	4	158	2286	2
	As-1	75	0.892	ug/L	0.098	10	9961	12033	0
	Se	82	0.065	ug/L	0.035	53	8	25	33
	Se	78	-0.011	ug/L	0.229	2040	10147	10155	0
	Mo	98	0.267	ug/L	0.003	0	10	1451	1
	Y	89		ug/L			476646	480026	2
	Kr	83		ug/L			449	477	2
>	In	115		ug/L			953484	969372	1
	Ag	107	0.002	ug/L	0.001	27	13	37	16
	Cd	111	0.007	ug/L	0.002	27	88	119	7
	Cd	114	0.003	ug/L	0.001	22	30	62	10
	Sb	121	0.133	ug/L	0.002	1	44	1804	1
	Sb	123	0.133	ug/L	0 001	0	34	1370	1
	Ba	135	6.266	ug/L	0.061	0	12	25894	0
	Ba	137	6.291	ug/L	0.047	0	27	44541	0
>	Tb	159		ug/L			1136829	1156976	1
	Tl	205	0.010	ug/L	0.002	16	37	387	14
	Pb	208	0.092	ug/L	0.001	0	262	4513	1
	Bi	209		ug/L			2635860	2581717	1
	Th	232	0.076	ug/L	0.004	5	82	3514	4
	U	238	0.015	ug/L	0.000	1	3	741	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R F REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 13:00:55
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	**Li**	**6**		ug/L			1864378	1929167	1
	Be	**9**	**0.003**	ug/L	0.001	52	14	28	23
	C	**13**		ug/L			127762	154399	2
	Cl	**37**		ug/L			4732762	5305563	2
>	**Sc**	**45**		ug/L			1351908	1436278	0
	V	**51**	**0.611**	ug/L	0.010	1	9535	27137	1
	V-1	**51**	**0.703**	ug/L	0.014	2	76	19459	2
	Cr	**52**	**0.296**	ug/L	0.005	1	28286	36987	0
	Cr	**53**	**0.599**	ug/L	0.020	3	171	1724	3
	Mn	**55**	**4.563**	ug/L	0.112	2	673	145357	2
	Co	**59**	**0.048**	ug/L	0.001	1	47	1118	1
>	**Ge**	**72**		ug/L			685770	678936	1
	Ni	**60**	**1.072**	ug/L	0.029	2	17	4619	2
	Ni	**62**	**1.082**	ug/L	0 066	6	137	810	5
	Cu	**63**	**2.201**	ug/L	0.031	1	147	21210	0
	Cu	**65**	**2.133**	ug/L	0.036	1	44	9102	1
	Zn	**66**	**2.420**	ug/L	0.043	1	266	6665	1
	Zn	**67**	**2.711**	ug/L	0.092	3	39	1244	3
	Zn	**68**	**2.967**	ug/L	0.047	1	255	5861	1
	As	**75**	**0.977**	ug/L	0.024	2	158	2361	1
	As-1	**75**	**0.970**	ug/L	0.066	6	9961	12072	0
	Se	**82**	**0.094**	ug/L	0.028	30	8	32	20
	Se	**78**	**0.115**	ug/L	0.163	142	10147	10123	0
	Mo	**98**	**0.290**	ug/L	0.007	2	10	1555	1
	Y	**89**		ug/L			476646	477938	0
	Kr	**83**		ug/L			449	458	2
>	**In**	**115**		ug/L			953484	964751	0
	Ag	**107**	**0.002**	ug/L	0.001	37	13	31	21
	Cd	**111**	**0.007**	ug/L	0.003	43	88	119	11
	Cd	**114**	**0.002**	ug/L	0.000	16	30	58	7
	Sb	**121**	**0.184**	ug/L	0.004	2	44	2464	2
	Sb	**123**	**0.177**	ug/L	0.004	2	34	1804	2
	Ba	**135**	**7.690**	ug/L	0.070	0	12	31625	0
	Ba	**137**	**7.734**	ug/L	0.081	1	27	54493	0
>	**Tb**	**159**		ug/L			1136829	1137899	0
	Tl	**205**	**0.008**	ug/L	0.001	12	37	333	12
	Pb	**208**	**0.094**	ug/L	0.001	1	262	4518	0
	Bi	**209**		ug/L			2635860	2550935	0
	Th	**232**	**0.054**	ug/L	0.002	4	82	2514	3
	U	**238**	**0.014**	ug/L	0.000	3	3	692	3

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R G REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 13:05:02
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1914111	0
	Be	9	0.003	ug/L	0.001	32	14	27	15
	C	13		ug/L			127762	153983	3
	Cl	37		ug/L			4732762	5169584	1
>	Sc	45		ug/L			1351908	1395460	0
	V	51	0.668	ug/L	0 022	3	9535	27891	1
	V-1	51	0.740	ug/L	0.023	3	76	19902	2
	Cr	52	0.385	ug/L	0.018	4	28286	37962	1
	Cr	53	0.623	ug/L	0.012	1	171	1734	2
	Mn	55	5.109	ug/L	0.064	1	673	158066	1
	Co	59	0.051	ug/L	0.001	1	47	1166	1
>	Ge	72		ug/L			685770	680890	0
	Ni	60	1.071	ug/L	0.024	2	17	4631	2
	Ni	62	1.063	ug/L	0.023	2	137	801	2
	Cu	63	2.283	ug/L	0.022	0	147	22058	0
	Cu	65	2.178	ug/L	0.024	1	44	9323	0
	Zn	66	1.927	ug/L	0.083	4	266	5377	3
	Zn	67	2.231	ug/L	0.129	5	39	1034	6
	Zn	68	2.532	ug/L	0.081	3	255	5052	2
	As	75	0.995	ug/L	0.029	2	158	2409	1
	As-1	75	0.991	ug/L	0.042	4	9961	12154	0
	Se	82	0.059	ug/L	0.045	77	8	23	48
	Se	78	0.106	ug/L	0.118	111	10147	10147	0
	Mo	98	0.310	ug/L	0.008	2	10	1668	1
	Y	89		ug/L			476646	474640	2
	Kr	83		ug/L			449	473	4
>	In	115		ug/L			953484	967374	1
	Ag	107	0.003	ug/L	0 000	10	13	42	7
	Cd	111	0.006	ug/L	0.001	14	88	117	2
	Cd	114	0.003	ug/L	0.000	14	30	64	8
	Sb	121	0.186	ug/L	0.002	1	44	2491	2
	Sb	123	0.181	ug/L	0.002	1	34	1846	0
	Ba	135	7.807	ug/L	0.088	1	12	32188	0
	Ba	137	7.830	ug/L	0.154	1	27	55307	0
>	Tb	159		ug/L			1136829	1145731	0
	Tl	205	0.008	ug/L	0 001	14	37	309	12
	Pb	208	0.093	ug/L	0.001	1	262	4492	1
	Bi	209		ug/L			2635860	2533192	0
	Th	232	0.041	ug/L	0.002	5	82	1913	4
	U	238	0.015	ug/L	0.000	1	3	711	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR804 H REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 13:09:09
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens. RSD
>	**Li**	**6**		ug/L			1864378	1919777	2
	Be	**9**	**0.003**	ug/L	0.002	50	14	32	27
	C	**13**		ug/L			127762	153937	2
	Cl	**37**		ug/L			4732762	5124488	0
>	**Sc**	**45**		ug/L			1351908	1429790	0
	V	**51**	**0.500**	ug/L	0.012	2	9535	23939	1
	V-1	**51**	**0.556**	ug/L	0.001	0	76	15339	0
	Cr	**52**	**0.234**	ug/L	0.031	13	28286	35389	2
	Cr	**53**	**0.417**	ug/L	0.007	1	171	1248	1
	Mn	**55**	**13.765**	ug/L	0.220	1	673	435089	0
	Co	**59**	**0.038**	ug/L	0.002	6	47	898	6
>	**Ge**	**72**		ug/L			685770	681979	1
	Ni	**60**	**0.752**	ug/L	0.014	1	17	3262	3
	Ni	**62**	**0.815**	ug/L	0.026	3	137	647	1
	Cu	**63**	**1.353**	ug/L	0.014	1	147	13151	2
	Cu	**65**	**1.229**	ug/L	0.033	2	44	5286	2
	Zn	**66**	**1.708**	ug/L	0.060	3	266	4803	1
	Zn	**67**	**1.909**	ug/L	0.128	6	39	890	4
	Zn	**68**	**2.156**	ug/L	0.078	3	255	4345	1
	As	**75**	**0.818**	ug/L	0.033	4	158	2012	2
	As-1	**75**	**0.866**	ug/L	0.113	13	9961	11885	0
	Se	**82**	**0.034**	ug/L	0.023	67	8	17	33
	Se	**78**	**0.239**	ug/L	0.274	114	10147	10252	0
	Mo	**98**	**0.274**	ug/L	0.003	1	10	1477	1
	Y	**89**		ug/L			476646	476803	0
	Kr	**83**		ug/L			449	465	2
>	**In**	**115**		ug/L			953484	964845	0
	Ag	**107**	**0.001**	ug/L	0.001	52	13	23	21
	Cd	**111**	**0.005**	ug/L	0.001	26	88	110	5
	Cd	**114**	**0.003**	ug/L	0.001	26	30	61	13
	Sb	**121**	**0.129**	ug/L	0.007	5	44	1747	5
	Sb	**123**	**0.127**	ug/L	0 002	1	34	1307	1
	Ba	**135**	**6.000**	ug/L	0.119	1	12	24679	1
	Ba	**137**	**5.954**	ug/L	0.120	2	27	41959	1
>	**Tb**	**159**		ug/L			1136829	1136716	1
	Tl	**205**	**0.007**	ug/L	0.000	5	37	284	4
	Pb	**208**	**0.054**	ug/L	0.002	3	262	2691	1
	Bi	**209**		ug/L			2635860	2548837	0
	Th	**232**	**0.027**	ug/L	0.001	5	82	1291	4
	U	**238**	**0.013**	ug/L	0.000	3	3	610	2

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT87 ADUP REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 13:14:20
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens RSD
>	**Li**	**6**		ug/L			1864378	1905471	1
	Be	**9**	**0.011**	ug/L	0.002	17	14	65	12
	C	**13**		ug/L			127762	140883	2
	Cl	**37**		ug/L			4732762	5524829	2
>	**Sc**	**45**		ug/L			1351908	1481340	2
	V	**51**	**4.241**	ug/L	0.133	3	9535	132094	2
	V-1	**51**	**4.407**	ug/L	0.112	2	76	125371	1
	Cr	**52**	**3.910**	ug/L	0.161	4	28286	125523	1
	Cr	**53**	**4.466**	ug/L	0.160	3	171	12034	1
	Mn	**55**	**0.039**	ug/L	0.003	8	673	2013	2
	Co	**59**	**0.116**	ug/L	0 008	7	47	2726	4
>	**Ge**	**72**		ug/L			685770	614055	0
	Ni	**60**	**1.446**	ug/L	0.059	4	17	5633	3
	Ni	**62**	**0.428**	ug/L	0.027	6	137	364	3
	Cu	**63**	**1.845**	ug/L	0.037	2	147	16102	1
	Cu	**65**	**1.408**	ug/L	0.053	3	44	5447	3
	Zn	**66**	**3.060**	ug/L	0.053	1	266	7560	2
	Zn	**67**	**18.131**	ug/L	0.776	4	39	7323	3
	Zn	**68**	**16.513**	ug/L	0.047	0	255	28455	0
	As	**75**	**3.562**	ug/L	0 109	3	158	7411	2
	As-1	**75**	**3.773**	ug/L	0.092	2	9961	16697	1
	Se	**82**	**9.691**	ug/L	0.201	2	8	2247	1
	Se	**78**	**10.178**	ug/L	0.105	1	10147	15340	0
	Mo	**98**	**0.843**	ug/L	0.021	2	10	4069	2
	Y	**89**		ug/L			476646	441018	1
	Kr	**83**		ug/L			449	478	3
>	**In**	**115**		ug/L			953484	885631	0
	Ag	**107**	**0.007**	ug/L	0.001	9	13	72	7
	Cd	**111**	**0.019**	ug/L	0.002	10	88	163	5
	Cd	**114**	**0.011**	ug/L	0.000	2	30	143	1
	Sb	**121**	**0.108**	ug/L	0.003	2	44	1346	3
	Sb	**123**	**0.107**	ug/L	0.002	1	34	1016	1
	Ba	**135**	**288.913**	ug/L	3.269	1	12	1090252	0
	Ba	**137**	**291.463**	ug/L	2.749	0	27	1884179	0
>	**Tb**	**159**		ug/L			1136829	1100692	1
	Tl	**205**	**0.015**	ug/L	0.000	1	37	571	1
	Pb	**208**	**0.247**	ug/L	0 002	0	262	11061	0
	Bi	**209**		ug/L			2635860	1959683	1
	Th	**232**	**0.031**	ug/L	0.001	4	82	1408	4
	U	**238**	**6.858**	ug/L	0.086	1	3	316923	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT87 A REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 13:18:27
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens RSD
>	Li	6		ug/L			1864378	1958090	2
	Be	9	0.005	ug/L	0.002	41	14	39	27
	C	13		ug/L			127762	141208	1
	Cl	37		ug/L			4732762	5619788	3
>	Sc	45		ug/L			1351908	1497110	1
	V	51	4.334	ug/L	0.073	1	9535	136234	1
	V-1	51	4.506	ug/L	0.072	1	76	129599	1
	Cr	52	3.968	ug/L	0.124	3	28286	128329	1
	Cr	53	4.545	ug/L	0.129	2	171	12379	1
	Mn	55	0.030	ug/L	0.003	9	673	1725	4
	Co	59	0.107	ug/L	0.002	1	47	2559	2
>	Ge	72		ug/L			685770	617435	0
	Ni	60	1.517	ug/L	0.056	3	17	5940	2
	Ni	62	0.392	ug/L	0.027	6	137	346	4
	Cu	63	1.902	ug/L	0.027	1	147	16685	1
	Cu	65	1.451	ug/L	0.003	0	44	5646	0
	Zn	66	3.988	ug/L	0.096	2	266	9833	1
	Zn	67	19.190	ug/L	0.204	1	39	7793	2
	Zn	68	17.443	ug/L	0.199	1	255	30209	0
	As	75	3.615	ug/L	0.117	3	158	7559	2
	As-1	75	3.854	ug/L	0.190	4	9961	16957	1
	Se	82	9.756	ug/L	0.070	0	8	2274	0
	Se	78	10.366	ug/L	0.285	2	10147	15539	0
	Mo	98	0.835	ug/L	0.020	2	10	4055	1
	Y	89		ug/L			476646	445509	0
	Kr	83		ug/L			449	502	5
>	In	115		ug/L			953484	900874	0
	Ag	107	0.002	ug/L	0.000	13	13	32	7
	Cd	111	0.011	ug/L	0.005	43	88	129	15
	Cd	114	0.005	ug/L	0.000	9	30	84	5
	Sb	121	0.103	ug/L	0.002	1	44	1311	1
	Sb	123	0.106	ug/L	0.003	2	34	1018	1
	Ba	135	289.176	ug/L	1.231	0	12	1110108	1
	Ba	137	293.863	ug/L	4.840	1	27	1932451	1
>	Tb	159		ug/L			1136829	1105992	0
	Tl	205	0.011	ug/L	0 000	3	37	411	3
	Pb	208	0.251	ug/L	0.003	1	262	11295	0
	Bi	209		ug/L			2635860	1962138	0
	Th	232	0.020	ug/L	0.001	4	82	928	2
	U	238	6.898	ug/L	0.009	0	3	320308	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VT87 ASPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 13:22:34
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1916332	1
	Be	9	23.209	ug/L	0.751	3	14	111403	1
	C	13		ug/L			127762	146909	2
	Cl	37		ug/L			4732762	5553687	1
>	Sc	45		ug/L			1351908	1450200	0
	V	51	27.929	ug/L	0.285	1	9535	794705	0
	V-1	51	28.242	ug/L	0.294	1	76	786449	0
	Cr	52	26.881	ug/L	0.400	1	28286	667020	0
	Cr	53	27.922	ug/L	0.332	1	171	72733	0
	Mn	55	22.843	ug/L	0.510	2	673	731851	1
	Co	59	22.168	ug/L	0.128	0	47	501690	0
>	Ge	72		ug/L			685770	612551	0
	Ni	60	27.744	ug/L	0.369	1	17	107520	1
	Ni	62	25.550	ug/L	0.123	0	137	14491	0
	Cu	63	28.072	ug/L	0.352	1	147	242548	1
	Cu	65	27.723	ug/L	0.524	1	44	106279	1
	Zn	66	76.291	ug/L	1.675	2	266	182318	1
	Zn	67	85.862	ug/L	1.938	2	39	34467	1
	Zn	68	86.986	ug/L	1.381	1	255	148540	0
	As	75	28.649	ug/L	0.719	2	158	58464	1
	As-1	75	29.665	ug/L	0.976	3	9961	69899	1
	Se	82	84.438	ug/L	1.094	1	8	19469	0
	Se	78	85.086	ug/L	1.913	2	10147	61214	0
	Mo	98	0.853	ug/L	0.017	2	10	4108	1
	Y	89		ug/L			476646	434918	1
	Kr	83		ug/L			449	467	0
>	In	115		ug/L			953484	878801	0
	Ag	107	25.490	ug/L	0.414	1	13	223529	1
	Cd	111	23.887	ug/L	0.127	0	88	99808	0
	Cd	114	23.624	ug/L	0.141	0	30	247370	0
	Sb	121	0.105	ug/L	0.003	2	44	1296	2
	Sb	123	0.104	ug/L	0.001	1	34	978	1
	Ba	135	317.737	ug/L	2.992	0	12	1189855	1
	Ba	137	344.386	ug/L	3.610	1	27	2209192	0
>	Tb	159		ug/L			1136829	1092963	0
	Tl	205	23.679	ug/L	0 157	0	37	813686	0
	Pb	208	24.048	ug/L	0.100	0	262	1046549	0
	Bi	209		ug/L			2635860	1926953	0
	Th	232	24.096	ug/L	0.078	0	82	1034570	0
	U	238	31.225	ug/L	0.061	0	3	1432940	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: VR80R MB2SPK REN
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, December 07, 2012 13:26:42
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD
>	Li	6		ug/L			1864378	1964309	1
	Be	9	24.370	ug/L	0.130	0	14	119940	1
	C	13		ug/L			127762	147759	4
	Cl	37		ug/L			4732762	5270129	3
>	Sc	45		ug/L			1351908	1378717	2
	V	51	24.086	ug/L	0.756	3	9535	652651	1
	V-1	51	24.278	ug/L	0.777	3	76	642492	1
	Cr	52	24.371	ug/L	0.173	0	28286	577618	1
	Cr	53	25.038	ug/L	0.536	2	171	62022	2
	Mn	55	25.676	ug/L	0.366	1	673	782009	2
	Co	59	24.132	ug/L	0.431	1	47	519186	2
>	Ge	72		ug/L			685770	671517	1
	Ni	60	26.314	ug/L	0.423	1	17	111778	0
	Ni	62	25.088	ug/L	0.557	2	137	15600	2
	Cu	63	26.246	ug/L	0.414	1	147	248564	0
	Cu	65	26.051	ug/L	0.242	0	44	109484	1
	Zn	66	81.744	ug/L	0.156	0	266	214160	1
	Zn	67	73.539	ug/L	0.525	0	39	32369	1
	Zn	68	77.979	ug/L	1.438	1	255	145985	0
	As	75	24.055	ug/L	0.327	1	158	53839	0
	As-1	75	24.604	ug/L	0.354	1	9961	65221	0
	Se	82	74.860	ug/L	0.874	1	8	18923	1
	Se	78	74.160	ug/L	0.919	1	10147	59765	1
	Mo	98	0.011	ug/L	0.000	3	10	65	1
	Y	89		ug/L			476646	457813	2
	Kr	83		ug/L			449	459	3
>	In	115		ug/L			953484	954967	2
	Ag	107	26.051	ug/L	0.342	1	13	248182	1
	Cd	111	24.347	ug/L	0.093	0	88	110552	2
	Cd	114	24.036	ug/L	0.505	2	30	273410	0
	Sb	121	0.004	ug/L	0.002	40	44	92	19
	Sb	123	0.004	ug/L	0.001	18	34	74	7
	Ba	135	24.936	ug/L	0.555	2	12	101449	0
	Ba	137	25.078	ug/L	0 603	2	27	174787	1
>	Tb	159		ug/L			1136829	1124954	0
	Tl	205	24.736	ug/L	0.199	0	37	874884	0
	Pb	208	25.653	ug/L	0.080	0	262	1149062	0
	Bi	209		ug/L			2635860	2589053	0
	Th	232	23.972	ug/L	0.121	0	82	1059367	0
	U	238	23.812	ug/L	0.094	0	3	1124743	0

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 13:30:51
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens RSD
>	Li	6		ug/L			1864378	1910491	1
	Be	9	51.208	ug/L	0.512	0	14	245118	2
	C	13		ug/L			127762	133541	2
	Cl	37		ug/L			4732762	5327860	3
>	Sc	45		ug/L			1351908	1342613	1
	V	51	47.136	ug/L	1.162	2	9535	1235191	2
	V-1	51	47.769	ug/L	0.814	1	76	1231378	1
	Cr	52	48.062	ug/L	1.384	2	28286	1082005	2
	Cr	53	50.258	ug/L	1.279	2	171	121047	1
	Mn	55	48.494	ug/L	0.901	1	673	1437500	0
	Co	59	47.837	ug/L	1.143	2	47	1002030	0
>	Ge	72		ug/L			685770	660367	0
	Ni	60	49.482	ug/L	0.659	1	17	206739	1
	Ni	62	49.001	ug/L	0.499	1	137	29840	0
	Cu	63	49.518	ug/L	0.656	1	147	461114	0
	Cu	65	49.956	ug/L	0.531	1	44	206441	0
	Zn	66	49.603	ug/L	0.587	1	266	127907	1
	Zn	67	49.741	ug/L	0.879	1	39	21543	1
	Zn	68	49.862	ug/L	0.265	0	255	91908	0
	As	75	49.513	ug/L	0.322	0	158	108837	0
	As-1	75	49.550	ug/L	0.341	0	9961	119461	0
	Se	82	50.820	ug/L	0.414	0	8	12636	0
	Se	78	50.405	ug/L	0.346	0	10147	43080	0
	Mo	98	49.432	ug/L	0.844	1	10	256094	1
	Y	89		ug/L			476646	455968	1
	Kr	83		ug/L			449	504	4
>	In	115		ug/L			953484	929284	0
	Ag	107	50.566	ug/L	0.599	1	13	468872	1
	Cd	111	50.460	ug/L	0.801	1	88	222856	1
	Cd	114	50.272	ug/L	0.669	1	30	556608	1
	Sb	121	50.462	ug/L	0.208	0	44	639190	0
	Sb	123	50.001	ug/L	0.244	0	34	481375	0
	Ba	135	49.530	ug/L	0.339	0	12	196142	0
	Ba	137	49.666	ug/L	0.309	0	27	336928	0
>	Tb	159		ug/L			1136829	1120894	0
	Tl	205	47.092	ug/L	0.674	1	37	1659479	0
	Pb	208	48.866	ug/L	0.571	1	262	2180657	0
	Bi	209		ug/L			2635860	2505056	0
	Th	232	51.612	ug/L	0.294	0	82	2272442	0
	U	238	51.676	ug/L	0.320	0	3	2432083	1

ICP-MS Quantitative Analysis - Summary Report

Sample ID: CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, December 07, 2012 13:37:43
Number of Replicates: 3
Method File: C:\NexION Data\Method\200.8nomin.mth
Tuning File: C:\NexION Data\MassCal\Default.tun
Optimization File: C:\NexION Data\Conditions\Default.dac
Calibration File: C:\NexION Data\System\120712.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens	Intens RSD
>	**Li**	**6**		ug/L			1864378	1859356	1
	Be	**9**	**0.001**	ug/L	0.001	106	14	18	19
	C	**13**		ug/L			127762	134339	0
	Cl	**37**		ug/L			4732762	5147173	0
>	**Sc**	**45**		ug/L			1351908	1316592	3
	V	**51**	**-0.003**	ug/L	0.020	594	9535	9190	2
	V-1	**51**	**0.014**	ug/L	0.002	13	76	421	10
	Cr	**52**	**-0.024**	ug/L	0.068	281	28286	26996	2
	Cr	**53**	**0.034**	ug/L	0.010	29	171	246	9
	Mn	**55**	**-0.003**	ug/L	0.002	53	673	559	5
	Co	**59**	**0.001**	ug/L	0.000	14	47	65	7
>	**Ge**	**72**		ug/L			685770	648893	2
	Ni	**60**	**0.001**	ug/L	0.000	64	17	19	7
	Ni	**62**	**0.212**	ug/L	0.015	7	137	256	1
	Cu	**63**	**0.006**	ug/L	0.002	33	147	191	11
	Cu	**65**	**0.001**	ug/L	0.003	211	44	46	19
	Zn	**66**	**-0.045**	ug/L	0.005	10	266	137	10
	Zn	**67**	**-0.048**	ug/L	0.013	26	39	16	30
	Zn	**68**	**-0.048**	ug/L	0.003	7	255	156	5
	As	**75**	**0.006**	ug/L	0.010	165	158	162	11
	As-1	**75**	**0.161**	ug/L	0.070	43	9961	9773	0
	Se	**82**	**-0.018**	ug/L	0.053	295	8	3	329
	Se	**78**	**0.541**	ug/L	0.239	44	10147	9950	0
	Mo	**98**	**0.009**	ug/L	0.003	28	10	58	23
	Y	**89**		ug/L			476646	447357	1
	Kr	**83**		ug/L			449	458	8
>	**In**	**115**		ug/L			953484	928199	1
	Ag	**107**	**0.002**	ug/L	0.001	48	13	34	28
	Cd	**111**	**0.006**	ug/L	0.002	31	88	110	5
	Cd	**114**	**0.001**	ug/L	0.000	58	30	36	10
	Sb	**121**	**0.067**	ug/L	0.009	13	44	885	13
	Sb	**123**	**0.066**	ug/L	0.009	13	34	664	13
	Ba	**135**	**-0.000**	ug/L	0.000	534	12	11	18
	Ba	**137**	**-0.000**	ug/L	0.001	217	27	23	28
>	**Tb**	**159**		ug/L			1136829	1092077	1
	Tl	**205**	**0.006**	ug/L	0.002	34	37	232	29
	Pb	**208**	**-0.001**	ug/L	0.000	30	262	212	5
	Bi	**209**		ug/L			2635860	2558124	0
	Th	**232**	**0.195**	ug/L	0.019	9	82	8436	9
	U	**238**	**0.003**	ug/L	0.000	5	3	160	4

Mercury Analysis Log

Analyst: VB

Instrument: CETAC

Date: 11-16-12

Page: 1 of 5

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
STD 0.0	TWM	1x		
" 0.1				
" 0.5				
" 1.0				
" 2.0				
" 5.0				
" 10.0				
ICV			7.95	Begin CLP %R=99
ICB			-0.01	
CCV1			4.00	%R= 100
CCB1			-0.01	
CRA			~~0.01~~ 0.03	CB 11/16/12
VBLK0 mB1			0.01	
" mB1spk			2.12	%R=106
" A			0.06	
" Adup			0.01	NO RPD: undetected)
" Aspk			1.05	%R= 105
" B			~~0~~	CB 11/16/12
" C				
" D	TWM			
" mB2	Dmm		0.01	
CCV2	TWM		4.00	%R=100
CCB2	TWM		-0.01	
VBLK0 mB2spk	Dmm		2.10	%R= 105
" E			0.00	
" Edup			0.01	NO RPD: undetected
" Espk			1.01	%R= 101
" F				
" G				
" H	Dmm			

Chemical/Reagent ID:

10% $SnCl_2$: MP2391

14% NH_2OH/NaCl: MP2360

Standard ID:

Standard: 2991-9

ICV/CCV: 56-18

Mercury Analysis Log

Analyst: CB **Date:** 11-16-12

Instrument: CETAC **Page:** 2 of 5

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
VR73 MB1	TWM	1x	0.01	
" MB1SPK			2.04	%R= 102
" A				
CCV3			4.02	%R= 101
CCB3			0.00	
VR73 B	TWM			
" MB2	DMM		0.01	
" MB2SPK			2.12	%R= 106
" C				
" D	DMM			
VR68 MB1	TWM		0.00	
" MB1SPK			2.15	%R= 108
" A			0.01	
" ADUP			~~1.05~~ 0.01	CB 11/16/12 ND RPD: undetected
" ASPK			1.05	%R= 105
CCV4			3.97	%R= 99
CCB4			-0.00	
VR68 B				
" C				
CCV5			4.00	%R= 100
CCB5			0.00	End of CLP
VR88 MB1			0.01	
" MB1SPK			2.08	%R= 104
" A			0.01	
" ADUP			0.02	ND RPD: undetected
" ASPK			0.97	%R= 97
" B				
" C				
" D				
" E				

11/19/12

Chemical/Reagent ID:

10% $SnCl_2$: MP2391 **14% NH_2OH/NaCl:** MP2300

Standard ID:

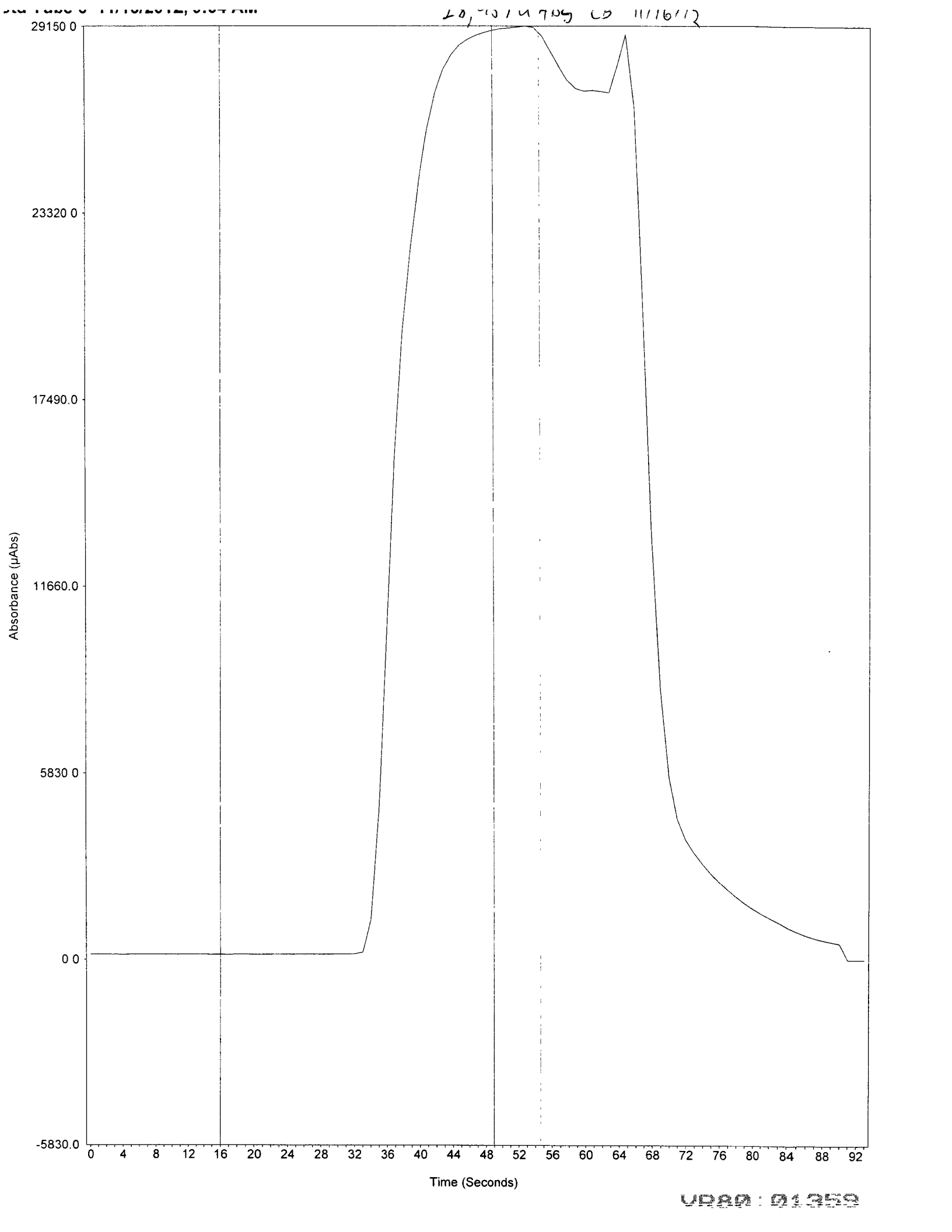
Standard: 2991-9 **ICV/CCV:** 56-18

ANALYTICAL RESOURCES INCORPORATED

Metals Data Review Checklist

Method: ICP ICP-MS GFA CVA **Analysis Date:** 11-16-17

	Analyst CB 11-16-12	Peer HJ 11.16.17	Comment
Logbook			
Analyst, Date, Method info	✓	✓	
Sample ID's	✓	✓	
Standard/QC solution ID's recorded	✓	✓	
Prep codes	✓	✓	
Dilution factors	✓	✓	
Crossouts/Corrections/Deletions	✓	✓	
Calibration			
Blank & Standard intensities	✓	✓	
Standard deviations	✓	✓	
Curve fit	✓	✓	
Calibration V			
ICV/CCV	✓	✓	
ICB/CCB	✓	✓	
Samples			
RSD's & SD's	✓	✓	
Internal Standards	✓	—	
Carry-over	✓	✓	
Method QC			
CRI/CRA	✓	✓	
ICSA/ICSAB	✓	—	
Post Spikes/Serial Dilutions	✓	—	
Analytic Spikes	✓	—	
Matrix QC			
SRM/LCS	✓	✓	
Matrix Spikes	✓	✓	
Matrix Duplicates	✓	✓	
Method Blanks	✓	✓	
Data Distribution			
Requested elements/isotope identified	✓	✓	
Correct samples identified for distribution	✓	✓	
Raw data match distributed data	✓	✓	
Data filename correct	✓	✓	
Nonconformance Documentation	✓	—	


29150 0
23320 0
17490.0
11660.0
5830 0
0 0
-5830.0
Absorbance (µAbs)
0
4
8
12
16
20
24
28
32
36
40
44
48
52
56
60
64
68
72
76
80
84
88
92
Time (Seconds)

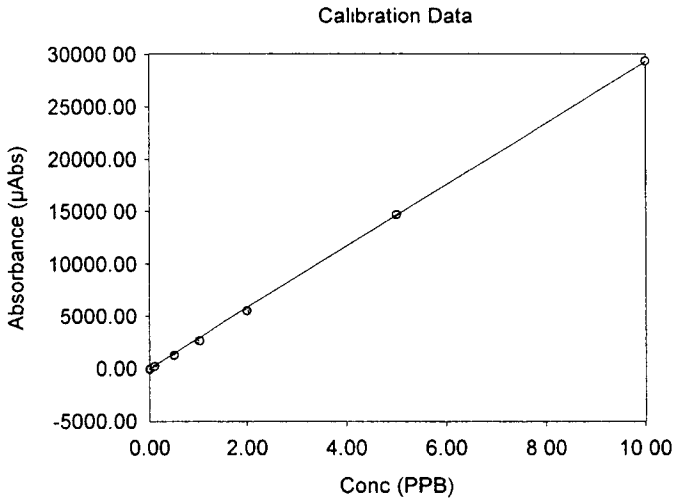
CETAC Hg Analysis Report - 12111600.DB - Friday, November 16, 2012, 1:01:59 PM

Analyst
Date Started Friday, November 16, 2012, 09.03.28
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Std Tube 6	16-Nov-2012, 09:03	10.00	0.13	29000.00	1.00	

Information about this calibration could not be retrieved from the Master File.

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
Calibration Zero	16-Nov-2012, 09:05	0.00	4.58	-41.20	1.00	
Standard #1	16-Nov-2012, 09:07	0.10	2.22	233.00	1.00	
Standard #2	16-Nov-2012, 09:09	0 50	0.17	1270.00	1.00	
Standard #3	16-Nov-2012, 09:10	1.00	0.37	2630.00	1 00	
Standard #4	16-Nov-2012, 09:12	2.00	0.40	5530.00	1.00	
Standard #5	16-Nov-2012, 09:13	5.00	0.29	14700 00	1.00	
Standard #6	16-Nov-2012, 09:15	10 00	0 43	29400 00	1 00	



Int.	0 000
Slope	2929.422
Correlation	0.99982

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
ICV	16-Nov-2012, 09:23	7.95	0.45	23300.00	1.00	
ICB	16-Nov-2012, 09:24	-0.01	32.50	-17 90	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	16-Nov-2012, 09:26	4.00	0.75	11700.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	16-Nov-2012, 09:28	-0.01	5.73	-25.20	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
CRA	16-Nov-2012, 09:29	0.09	1.29	275.00	1.00	
VR80 MB1 TWM	16-Nov-2012, 09:31	0.01	7.86	32.30	1.00	
VR80 MB1SPK TWM	16-Nov-2012, 09:32	2.12	0.28	6220.00	1 00	
VR80 A TWM	16-Nov-2012, 09:34	0.00	36.20	12.30	1.00	
VR80 ADUP TWM	16-Nov-2012, 09:36	0.01	11.90	37 60	1.00	
VR80 ASPK TWM	16-Nov-2012, 09:37	1.05	0.46	3090.00	1.00	
VR80 B TWM	16-Nov-2012, 09:39	0.01	9.25	29.60	1.00	
VR80 C TWM	16-Nov-2012, 09:40	0.01	5.29	38 90	1.00	
VR80 D TWM	16-Nov-2012, 09:42	0 04	1.28	122 00	1.00	
VR80 MB2 DMM	16-Nov-2012, 09:44	0.01	6.35	30.50	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	16-Nov-2012, 09:45	4.00	0.52	11700.00	1.00	

Analyst
Date Started Friday, November 16, 2012, 09.47 27
Worksheet ARI 10ppb CALIB
Comment

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	16-Nov-2012, 09 47	-0 01	3.59	-19.70	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
VR80 MB2SPK DMM	16-Nov-2012, 09:49	2.10	0.59	6160 00	1 00	
VR80 E DMM	16-Nov-2012, 09:50	0 00	12.90	11 50	1.00	
VR80 EDUP DMM	16-Nov-2012, 09:52	0.01	12.30	25.20	1.00	
VR80 ESPK DMM	16-Nov-2012, 09.53	1 01	0 52	2940.00	1.00	
VR80 F DMM	16-Nov-2012, 09:55	0.00	6.66	8.95	1.00	
VR80 G DMM	16-Nov-2012, 09:57	0.01	6 76	32.40	1 00	
VR80 H DMM	16-Nov-2012, 09:58	0.01	6.37	26.30	1.00	
VR73 MB1 TWM	16-Nov-2012, 10:00	0.01	8.74	29.70	1.00	
VR73 MB1SPK TWM	16-Nov-2012, 10:01	2 04	0.71	5980.00	1.00	
VR73 A TWM	16-Nov-2012, 10:03	1.46	1.09	4290.00	1 00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	16-Nov-2012, 10:05	4 02	0.53	11800.00	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	16-Nov-2012, 10:06	0.00	45.40	8.38	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
VR73 B TWM	16-Nov-2012, 10:08	0 00	23.10	14 10	1.00	
VR73 MB2 DMM	16-Nov-2012, 10:10	0.01	8.20	29.60	1.00	
VR73 MB2SPK DMM	16-Nov-2012, 10:11	2.12	0.62	6200.00	1.00	
VR73 C DMM	16-Nov-2012, 10:13	0.01	4 53	35.80	1.00	
VR73 D DMM	16-Nov-2012, 10:14	0.00	11.10	14.20	1.00	
VR68 MB1 TWM	16-Nov-2012, 10:16	0.00	8 15	9.41	1.00	
VR68 MB1SPK TWM	16-Nov-2012, 10:18	2.15	1.14	6290.00	1.00	
VR68 A TWM	16-Nov-2012, 10.19	0.01	5.18	21.60	1.00	
VR68 ADUP TWM	16-Nov-2012, 10 21	0.01	9.32	28.00	1.00	
VR68 ASPK TWM	16-Nov-2012, 10:23	1.05	0.75	3070.00	1 00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	16-Nov-2012, 10:24	3.97	0.30	11600.00	1 00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	16-Nov-2012, 10:26	-0.00	15300.00	-0 01	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
VR68 B TWM	16-Nov-2012, 10:28	0.02	2.10	51 40	1.00	
VR68 C TWM	16-Nov-2012, 10.29	0.01	3.52	39.10	1.00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Standard	16-Nov-2012, 10.31	4.00	0.75	11700.00	1 00	

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
QC Blank	16-Nov-2012, 10:32	0.00	21.80	9.38	1.00	End of LL?

Sample ID	Analysis Time	Conc (PPB)	%RSD	Avg. µAbs	Dilution	Flags
VR88 MB1 TWM	16-Nov-2012, 10:39	0.01	2.13	37 10	1.00	
VR88 MB1SPK TWM	16-Nov-2012, 10.41	2.08	0.71	6100.00	1.00	
VR88 A TWM	16-Nov-2012, 10:42	0.01	6.25	39.20	1.00	
VR88 ADUP TWM	16-Nov-2012, 10:44	0.02	1.90	57.40	1.00	
VR88 ASPK TWM	16-Nov-2012, 10:45	0.97	0.67	2850.00	1.00	
VR88 B TWM	16-Nov-2012, 10:47	0.02	2.39	67.80	1.00	
VR88 C TWM	16-Nov-2012, 10:49	0.02	1.94	55.30	1.00	
VR88 D TWM	16-Nov-2012, 10:50	0.02	2 34	59.50	1.00	
VR88 E TWM	16-Nov-2012, 10:52	0.02	5.41	44.40	1 00	
VR88 MB2 TWM	16-Nov-2012, 10.53	0 01	5 92	35.10	1 00	

Analyst	
Date Created:	Thursday, July 13, 2000
Worksheet	ARI 10ppb CALIB
Comment	
Sip Duration (Sec.):	30
Rinse Duration (Sec.):	60
Read Delay:	49
Integration Time/Replicate:	1 40
# of Replicates:	4
# of Repeats:	1
Baseline Correction Enabled:	True
Baseline Point 1 Start Time:	10
Baseline Point 1 End Time:	16
2-Point Baseline Corr. Enabled:	False
Baseline Point 2 Start Time:	
Baseline Point 2 End Time:	
Gas Flow (ml/min):	180
Calibration Algorithm:	Linear, Zero Intercept
Recalibration Frequency:	0
Reslope Frequency:	0
Reslope Standard:	5
Calibration Standard #1 Conc.:	0.10 PPB
Calibration Standard #2 Conc.:	0.50 PPB
Calibration Standard #3 Conc.:	1.00 PPB
Calibration Standard #4 Conc.:	2.00 PPB
Calibration Standard #5 Conc.:	5.00 PPB
Calibration Standard #6 Conc.:	10.00 PPB
QC Enabled:	True
QC-RSD Enabled:	True
Limit Condition & Error Action:	If %RSD > 5.0%, if µAbs. > 1500, Flag and Continue
QC-Std Enabled:	True
Limit Condition & Error Action:	If outside 80% 120%,Stop
QC-Blank Enabled:	True
Limit Condition & Error Action:	If outside -100 .. 100,Stop

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Standard Prep Log

Digested 20.0mL

Prep Code: TWM Instrument: CETAC

Analyst: NB Date: 11-08-12

Bath Temp: 90°C Start Time: 1651 End Time: 1851

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	—	0.00	100.0	0.0	1
STD1	2990-B	0.01		0.1	1
STD2		0.05		0.5	1
STD3		0.10		1.0	1
STD4		0.20		2.0	1
STD5		0.50		5.0	1
STD6		1.00		10.0	1
CRA	↓	0.01		0.1	1
ICB/CCB	—	0.00		0.0	1
ICV/LCS	56-18	0.16 ~~8.0~~ *	↓	8.0	1
CCV	↓	0.08 ~~4.0~~ *	100.0	4.0	1

* NB 11-08-12

Chemical/Reagent ID:

HNO_3: I7833 H_2SO_4: I7677 HCl: —

5% $K_2S_2O_8$: MP2375 5% $KMnO_4$: MP2376

Prep Code: TWM Digested 20.0 mL Instrument: CETAC

Analyst: NB Date: 11-13-12

Bath Temp: 90°C Start Time: 1145 End Time: 1345

Standard ID	Stock ID	Volume Added (mL)	Final Volume (mL)	Standard Conc. (µg/L)	Number Made
STD0	—	0.00	100.0	0.0	1
STD1	2990-B	0.01	↓	0.1	1
STD2	↓	0.05		0.5	1
STD3		0.10		1.0	1
STD4		0.20		2.0	1
STD5		0.50		5.0	1
STD6		1.00		10.0	1
CRA	↓	0.01		0.1	1
ICB/CCB	—	0.00		0.0	1
ICV/LCS	56-18	0.16	↓	8.0	1
CCV	↓	0.08	100.0	4.0	1

Chemical/Reagent ID:

HNO_3: I7833 H_2SO_4: I7677 HCl: —

5% $K_2S_2O_8$: MP2375 5% $KMnO_4$: MP2376

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: DMM Matrix: WATER

Analyst: LB Date: 11-12-12

Bath Temp: 90°C Start Time: 1100 End Time: 1300

ARI Sample ID	Sample Bottle #	pH<2	Initial ~~Weight (g)~~ Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
VR80 E	1	-	20.0	20.0	11/24 1	Y	
" Edup	1	-			1		
" ESpik	1	-			1		
" F	1	-			1		
" G	1	-			1		Filter - d preserved in 10b
" H	1	-			1		
" mB3	-	-			1	Y	
" mB3spk	-	-			1		
~~VR73~~ C	1	-			11/18 1	N	
" D	1	-			1		
" mB3	-	-			1		
" mB3spk	-	-	20.0	20.0	1	N	

11/19/12

11-12-12 CB

Chemical/Reagent ID:

HNO_3: MP2342 27833 H_2SO_4: 27677 HCl: -

5% $K_2S_2O_8$: MP2325 5% $KMnO_4$: MP2376 Digest Tube Lot: 120143

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: TWM Matrix: WATER
Analyst: CB Date: 11-12-12
Bath Temp: 95°C Start Time: 1100 End Time: 1300

ARI Sample ID	Sample Bottle #	pH<2	Initial ~~Weight~~ (g) Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
VA86 A	1	✓	20.0	20.0	11/24 1	Y	
" ACMP	1	✓			1		
" ASPK	1	✓			1		
" B	1	✓			1		
" C	1	✓			1		
" D	1	✓			1		
" MB1	—	—			1		
" MB1SPK	—	—			1	Y	
VA88 A	10	✓			11/19 1	N	
ACMP	10	✓			1		
ASPK	10	✓			1		
B	6	✓			1		
C	6	✓			1		
MB1	—	—			1		
MB1SPK	—	—			1	N	
VA73 A	7	✓			11/18 1	N	
" B	7	✓			1		
" MB1	—	—			1		
" MB1SPK	—	—	20.0	20.0	1	N	
			11-12-12				

Pjc 11/19/12

Chemical/Reagent ID:

HNO_3: I7833 H_2SO_4: 376?? HCl: —

5% $K_2S_2O_8$: MP2375 5% $KMnO_4$: MP2376 Digest Tube Lot: 1207193

General Chemistry Raw Data
Analyst Notes and Raw Data

ARI Job ID: VR80

TOTAL SUSPENDED SOLIDS / VOLATILE SUSPENDED SOLIDS (TSS / TVSS) DATE: 11/12/2012

Methods : SM 2540 D-97, 2540 E-97 ANALYST: CDE

Instrumentation ***Drying Ovens:*** 12 ***Analytical Balance:*** 1123230597

Muffle Furnace: NA

make no entries to shaded cells
they are calculated !!

TSS (mg/l) calculated as:
Final dry wt (mg) = (minimum Dry Wt - Tare Wt)*1000
TSS = [(Final Dry Wt)/ ml Sample] * 1000
if dy wt < 1mg, TSS = <1mg / mL sample * 1000
with "<" flag

Loss on ignition (LOI) = TVSS (mg/L) calculated as:
LOI (mg) = Dry wt(mg) -((min ash wt - tare wt) * 1000)
TVSS (mg/L) = LOI / mL sample * 1000
if LOI <1mg, TVSS = <1mg / mL sample * 1000
with "<" flag

LCS source: *Cellulose, MP Biomedicals Lot# **6399J*** 0.05 grams to 1000 mL = **50** ***mg/L TSS***

SAMPLE ID	DISH #	filtered (mL)	TARE WT (grams)	DRY WT 104C (grams) 1	2	3	4	DryWT (mg)	TSS (mg/L)	ASH WT 550C (grams) 1	2	3	4	LOI (mg)	TVSS (mg/l)
Cal Weight ID			CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02	CV-02	CV-02		
Date & Time				11/12/12 12:43	11/12/12 15:07										
Cal Wt (g) 10.0000				10.0000	10.0000										
record weights to 4 places				*Cal OK!*	*Cal OK!*										
BLANK		1000	0.1208	0.1206	0.1206	STOP		-0.2	**< 1**						
LCS # 00606-12		1000	0.1204	0.1704	0.1706	STOP		50.0	**50.0**	100.0%	% Recovery				
VR48 A2		200	0.1209	0.1370	0.1369	STOP		16.0	**80.0**						
VR48 A2 dup		200	0.1216	0.1381	0.1380	STOP		16.4	**82.0**						
								RPD =	*2.5%*					*RPD =*	*NA*
VR48 B2		900	0.1202	0.1209	0.1209	STOP		0.7	**< 1.1**						
VR61 A5		930	0.1146	0.1147	0.1148	STOP		0.1	**< 1.1**						
VR68 A8		1000	0.1143	0.1213	0.1212	STOP		6.9	**6.9**						
VR68 B4		500	0.1162	0.1335	0.1334	STOP		17.2	**34.4**						
VR68 C4		1000	0.1043	0.1043	0.1043	STOP		0.0	**< 1**						
VR73 A6		100	0.1048	0.1223	0.1223	STOP		17.5	**175.0**						
VR73 A6 dup		100	0.1190	0.1367	0.1365	STOP		17.5	**175.0**						
								RPD =	*0.0%*					*RPD =*	*NA*
VR73 B6		1000	0.1183	0.1185	0.1185	STOP		0.2	**< 1**						
VR75 D1		1000	0.1051	0.1068	0.1068	STOP		1.7	**1.7**						
VR75 E1		995	0.1178	0.1204	0.1202	STOP		2.4	**2.4**						
VR75 F1		1000	0.1042	0.1071	0.1070	STOP		2.8	**2.8**						
VR76 A2		200	0.1183	0.1366	0.1363	STOP		18.0	**90.0**						
VR76 B2		900	0.1050	0.1049	0.1050	STOP		-0.1	**< 1.1**						
VR80 A4		650	0.1191	0.1284	0.1281	STOP		9.0	**13.8**						
VR80 B4		930	0.1211	0.1245	0.1246	STOP		3.4	**3.7**						
VR80 C4		945	0.1180	0.1212	0.1213	STOP		3.2	**3.4**						
VR80 D4		900	0.1213	0.1231	0.1231	STOP		1.8	**2.0**						

Analytical Resources, Incorporated
Analytical Chemists and Consultants

TOTAL SUSPENDED (TSS) / TOTAL VOLATILE SUSPENDED SOLID(TVSS) BENCHSHEET

Analyst:		Date/Time:	11-12-12 16:35	Oven #:	12	Muffle Furnance:	6	Balance:	1123230597

Dry at 104 °C (12-24 hrs) then combust at 550 °C for 30 min. Record Weights to 4 places

TSS (mg/L) calculated as.
Final Dry Weight (mg) = (Min Dry Weight – Tare Weight) * 1000
TSS = (Final Dry Weight) / (mL Sample) * 1000
If dry wt < 1 mg / mL sample * 1000 use "<" flag

Loss on Ignition (LOI) = TVSS (mg / L) is calculated as
LOI (mg / L) = Dry Weight (mg) – [(Minimum Ash Weight – Tare Weight) * 1000]
TVSS (mg / L) = LOI / mL sample * 1,000
If LOI < 1 mg, TVSS = < 1 mg / mL sample * 1000 use "<" flag

LCS (Cellulose from MP Biochemicals) Lott #	6399J	0.0500 Gram to 1000 mL = **50 mg / L TSS**							
Cal Weight ID	CV-02	CV-02	CV-02	CV-02	CV-02			CV-02	CV-02
Date & Time.			11-9-12 12:43	11-12-12 15:07					
Cal Weight (10 0000g)			10.0000 gm	10.0000 gm					

Sample ID	Dish #	Filtered mL	Tare	Dry Weight 104°C (grams)			Dry Wt mg	TSS	Ash Weight 550°C		LOI - mg	TVSS mg/L
				1	2	3			1	2		
BLANK	A550	1000	0.1208	0.1206	0.1206							
LCS #2	91	1000	0.1704	0.1704	0.1706							
	52	1000	0.1209	0.1370	0.1369							
	53	1000	0.1216	0.1381	0.1380							
	54	1000	0.1202	0.1209	0.1209							
	55	1000	0.1146	0.1147	0.1149							
	56	1000	0.1143	0.1213	0.1212							
	57	500	0.1162	0.1335	0.1334							
	58	1000	0.1043	0.1043	0.1043							
	59	1000	0.1218	0.1223	0.1223							
	60	1000	0.1190	0.1367	0.1365							
	91	1000	0.1183	0.1185	0.1185							
	92	1000	0.1057	0.1068	0.1068							
	93	1000	0.1178	0.1204	0.1202							
	94	1000	0.1042	0.1071	0.1070							
	95	500	0.1183	0.1366	0.1363							
	96	1000	0.1050	0.1049	0.1050							
	97	1000	0.1191	0.1284	0.1281							
	98	1000	0.1211	0.1245	0.1246							
	99	1000	0.1180	0.1212	0.1213							
	A550	1000	0.1213	0.1231	0.1231							

W

11-16-12

TOTAL DISSOLVED SOLIDS (TDS) BENCHSHEET DATE: 11/12/2012

Method : SM 2540 C-97 ANALYST: CDE / KE 11:50

Objective is to have at least 25 mg of dry weight residue. If residue after the first reading is <25 mg add an additional 100 mL of filtered sample.

Total residue weight should be less than 200 mg!

TDS (mg/l) calculated as:

Final wt (mg) = (minimum Dry Wt - Tare Wt)*1000 after drying at 180C

(NOTE: if additional volume is added, first dry wt will be ignored!)

TDS = [(Final Wt)/ Sample Volume (orig + added)] x 1000

442 TDS Standard *ARI #* ***599-12***

0.80 g NaHCO3 0.80 g Na2SO4 0.40 g NaCl in 4000 mL = 500 mg/L

DQL Standard (50 mg/L) *Dilute* 10.0 *mL 500 mg/L to* 100 mL = 50 mg/L

Instrumentation ***Drying Oven ID:*** ***Analytical Balance ID:*** 1123230597

SAMPLE ID	DISH #	SAMPLE VOL (ml) ORIGINAL	SAMPLE VOL (ml) ADDED	TARE WT (grams)	180C Dry Weight (grams) 1	2	3	4	FINAL WT (mg)	TDS (mg/l)
Cal Weight ID					CV-02	CV-02	CV-02	CV-02		
Date & Time –>					11/15/12 11:11	11/16/12 12:55				
Cal Wt (g) 100.0000					100.0000	100.0000				
record weights to 4 places					*Cal OK!*	*Cal OK!*				
BLANK		200		110.2623	110.2619	110.2616	STOP		-0.7	< 5
LCS # 599-12		100		116.5838	116.6338	116.6338	STOP		50.0	500
										100%
DQL# 00603-06		200		127.2931	127.3002	127.3002	STOP		7.1	35.5
VR80 A3		200		126.3949	126.4104	126.4101	STOP		15.2	76
VR80 A3 dup		200		127.9208	127.9346	127.9345	STOP		13.7	69
										RPD =9.7
VR80 B3		200		136.7048	136.7204	136.7208	STOP		15.6	78
VR80 C3		200		123.3050	123.3198	123.3201	STOP		14.8	74
VR80 D3		200		132.2619	132.2737	132.2739	STOP		11.8	59

UDEQ : 2012-2013

Analytical Resources, Incorporated
Analytical Chemists and Consultants

TOTAL DISSOLVED SOLIDS (TDS) BENCHSHEET

① 11-16-12 (W)

Analyst: ADL (W)	Date: 11-12-12 11:50	Oven ID: ~~#2~~ 001/003	Balance ID: 1123230597

Objective is to have at least 25 mg of dry weight residue. If residue after the first reading is < 25 g add an additional 100 mL of filtered sample. Total residue weight should be less than 200 mg!

TDS (mg/l) calculated as:
Final weight (mg) = (minimum dry weight – tare) * 1000 after drying at 180 °C
Note: if additional volume is added, first dry wt will be ignored)
TDS = [(Final Wt) / Sample Volume (original + added)] x 1000

442 TDS Standard ID:
0.80 g $NaHCO_3$ + 0.80 g Na_2SO_4 = 0.40 g NaCl in 4000 mL = 500 mg/L

Record Weights to 4 places

Cal Weight ID	CV-02	CV-02	CV-02	CV-02
Date & Time:	11-15-12 11:11	11-16-12 12:55		
Cal Weight (100.0000):	~~100.0000~~ (W)	100.0000 ADL		

Sample ID	Dish #	Sample Volume		Tare Weight	180 °C Dry Weight			
		Original	Added		1	2	3	4
BLANK	~~#2~~ 90	200	X	110.2623	110.2619	110.2616		
LCS ~~#~~ 999-12	108	100		116.5838	116.6338	116.6338		
~~LCSD #00603-06~~	64	200		127.2931	127.3002	127.3002		
VRSO A^3	~~#4~~ 74			① ~~126.4~~ 126.3949	126.4104	126.4101		
A^3 dup	B9			127.9208	127.9346	127.9345		
B^3	151			136.7048	136.7204	136.7208		
C^3	163			123.3050	123.3198	123.3201		
D^3	145			132.2619	132.2737	132.2739		

11-12-12